

**A Theoretical Framework for  
Research in Interior Design:  
Implications for Post-Secondary Interior Design  
Education in Canada and the United States**



**Cynthia M. Karpan**

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Research in Interior Design:  
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A thesis submitted to the Faculty of Graduate Studies  
of the University of Manitoba in partial fulfillment  
of the requirement of the degree of

**Doctor of Philosophy**

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*For my Dad  
who provided unwavering and unconditional  
support for my educational goals*

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---

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## Abstract



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A growing number of interior design stakeholders believe that increased levels of research will lead to the legitimization of the profession, an expanded and specialized body of knowledge, professional recognition, disciplinary status, and sustainability of the profession. Despite the potential importance of research in the profession, few strategies exist for how research can have a more effective role within interior design. The main purposes of this study were to provide a strategy for incorporating research into interior design, and provide educators with information about how interior design programs could utilize the strategy.

The qualitative study was based on a triangulated research design that included: (a) semi-structured telephone interviews with 29 participants (11 from educational institutions, 14 from professional practice, and 5 from professional organizations); (b) the collection of documents from all study participants; and (c) a case study, conducted over a five day period, within a professional practice firm in the United States.

The study findings provide insight into the perceptions held by educators, practitioners, and members of professional organizations about research, and research in interior design specifically. These perceptions, combined with other information, led to the Theoretical Framework for Research in Interior Design. Consisting of three distinct, but interconnected, cultures: (a) design, (b) research, and (c) knowledge management, the Framework explains who, what, when, where, why, how, and with what consequences research is conducted, translated, used, and disseminated in interior design.

The implications of the Framework for post-secondary interior design education programs suggest that first-professional undergraduate programs could focus on interior design, first-professional masters programs could focus on knowledge management, and

post-professional masters and Ph.D. programs could focus on research. This arrangement would provide each level of post-secondary education and each program type with a specific focus, and would provide the discipline with a range of graduates capable of taking on a variety of roles within professional firms, educational institutions, professional organizations, industry, or government.

Overall, the Framework provides a strategy for ensuring that the interior design profession retains its design identity, and expands and capitalizes on its research identity. At the same time, the Framework introduces a new identity that can bring designers and researchers together in more productive and beneficial ways.

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Figure 5 was adapted from Guerin et al. (1995b).

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# Chapter One

## Introduction



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For decades, research has been a recurring topic of interest for interior designers, architects, landscape architects, industrial designers, and others in the design professions. Since the 1940s, architects and designers have made numerous attempts to understand the linkages between research and design, the nature of research within design, and ways to incorporate research into the various design professions (Bannister, 1947). Since the 1990s, designers' interests in research have grown to the point where research is now a focal topic within most of the design disciplines.

During the past two decades, architects' and designers' renewed interests in research is likely the result of numerous factors: (a) the emergence of a knowledge society where knowledge is considered to be a commodity; (b) increased pressure on academic institutions, and the design programs that operate within them, to produce research; (c) increased demand from an intelligent and complex clientele who demand evidence-based design solutions; and (d) designers' increasing beliefs that research is a sure way to legitimize and sustain the design professions. Whatever the reasons may be, research continues to be an important topic in interior design and



allied disciplines.

In interior design, a growing number of stakeholders consider research to be a critical factor that will lead to an expanded and specialized body of knowledge, professional recognition, disciplinary status, and legitimization and sustainability of the profession. Attaining these goals would mark the evolution of interior design from its current position as an art-based profession to the more highly valued position of a research- or evidence-based<sup>1</sup> profession (International Interior Design Association [IIDA], 2003). A growing number of stakeholders also believe that graduate education will play an important role in this evolution (Dickson & White, 1994; Guerin et al., 1995b; Thompson & Guerin, 2002).

## **1.1 STUDY PURPOSE AND RESEARCH QUESTIONS**

### **1.1.1 Study Purpose**

Given the perceived and potential importance of research in the interior design profession, the main purpose of this study was to develop a Theoretical Framework for Research in Interior Design. The Framework was envisioned as a strategy for helping interior design evolve from an art-based to an evidence-based profession, and was considered necessary because few strategies seem to exist for this important evolution to occur. Tellingly, the most prevalent message in the literature seems to be simply that “more” research is needed.

Given the potential importance of graduate education in establishing a research-based profession, an equally important objective of the study was to describe the implications that the Theoretical Framework would have for post-secondary interior design programs in Canada and the

United States. The assumption here was that any strategy for research in interior design would have at least some implications not only for graduate education, but for all post-secondary interior design education programs.

Like other stakeholders in the profession, interior design educators have little information about how to promote research in interior design. Currently, educators promote research by providing graduate programs (which may or may not have a research focus), and by teaching research methods courses within these programs (if, in fact, the programs have a research focus). The results described in Chapter Five explain why there may be more effective ways to promote a research culture in interior design.

In order to develop the Theoretical Framework for Research in Interior Design, a logical starting point was to find out more about the nature and purpose of research in interior design. What do interior designers think research is? Do interior designer practitioners, educators, and students have similar views about research and, if not, then what are the differences? What kinds of research exist in interior design? Who produces research in interior design, how is it used, and by whom? These and other questions suggested that there was a need to find out about different stakeholders' perceptions about the nature and purpose of research in interior design.

Seeking a range of perceptions about research, the focus of the study logically centered on interior designers functioning in education, practice, and professional organizations. Individuals within these contexts could provide unique perspectives about research, and collectively, these perspectives could provide a holistic vision about the nature and purpose of research in interior design. How, exactly, this information would be transformed into a

*“Consensus was reached regarding a view for the future of the interior design profession. Research and graduate education were considered means by which the profession can document its value to society, empower its members, and ensure long-term sustainability.*

*Without graduate education and a strong, ever-expanding knowledge base, interior design may cease to exist as a separate and distinct profession” (Dickson & White, 1994, p. 3).*

*“Further information is needed on how practitioners define ‘research’ and what implications this word has to [sic] practitioners.*

*Further investigation is needed to discover what conducting research and using research information means to the [sic] practitioners to clarify their understanding of the purpose, importance, and applicability of research in interior design” (Lawlor, 1998, p. 129).*

Theoretical Framework was not clear at the outset of the study. It seemed reasonable, however, that discovering as much as possible about the nature and purpose of research in interior design would provide a broad range of data from which a theoretical framework could emerge.

### **1.1.2 Research Questions**

In order to find out about the nature of research in interior design, and to obtain the widest range of data possible about the topic, numerous research questions were developed. Focusing on the three contexts identified earlier, the main research questions were formulated as follows:

1. How is research defined and understood?
  2. How, when, why, and by whom is research used and conducted?
  3. What kinds of research are used and needed?
  4. Who or what (organization, institution, industry, discipline, profession, etc.) are the sources of research used currently?
  5. Who or what (organization, institution, industry, discipline, profession, etc.) should conduct future research?
- Eventually, these questions were organized into a ten item interview guide that was used to collect data (see Appendix C).

## **1.2 ASSUMPTIONS, OPERATIONAL DEFINITIONS, AND LIMITATIONS**

Despite the clear purpose of the study, it was difficult to ignore personal assumptions that have developed over years of teaching interior design and, in particular, teaching graduate level research methods courses, and undergraduate level design inquiry courses.

Acknowledgement of these assumptions adds credibility to this qualitative study.

A discussion of operational definitions is also included in this section. Through the data analysis phase, it became clear that these definitions are critical, as without them, the entire Theoretical Framework for Research in Interior Design may be difficult to understand or accept.

An explanation of the study's limitations helps put the results in perspective. That is, as much as the Theoretical Framework is intended to provide a strategy for helping interior design attain its evolutionary goal of becoming an evidence-based profession, the way in which the results were obtained does have limitations.

### **1.2.1 Assumptions**

At the outset of the study, two assumptions prevailed. The first assumption was that since the process of design seems to be similar to qualitative research, especially to the type of qualitative research known as "grounded theory" (Glaser & Strauss, 1967), then interior design could be considered to be a valid form of research. In fact, early on in the data analysis phase, it seemed possible that thinking of "design as research" could result in the formation of a new research paradigm equivalent, perhaps, to quantitative and qualitative research. Such a paradigm, it was thought, could have profound effects in terms of how interior design and related professions are understood, valued, and recognized, and how research is taught in interior design. Even though the idea of design research as a unique paradigm was not supported by the data, the concept is explained further in Chapters Two and Five.

The second assumption that existed at the outset of the study was that even though similarities exist between interior design, research, and inquiry, each process should be undertaken for a specific purpose, involve a unique set of activities, and result in a distinct set of products. This theory suggested that interior design and research should be distinct activities, and that research and inquiry are not the same thing. Even though the study results do not address the topic of inquiry, the idea that research and design should be distinct and separate activities is evident from the study results. The fact that the study results extend beyond this assumption, however, suggests that the study was not limited by the assumption.

### **1.2.2 Operational Definitions**

Four operational definitions are necessary in order to understand and accept the study rationale and findings. First, it is important to distinguish between the two phrases, “research in interior design,” and “interior design research.” In the title of the study, the phrase “research in design” is used, as opposed to “interior design research,” because the two phrases represent very different ideas. “Research in interior design” is a broad term that describes research used in interior design. Such research may be conducted by researchers either in or outside of interior design, and may be about topics that relate, but are not exclusive, to interior design. For example, research conducted by carpet manufacturers may be used by interior designers, but such research is not created by interior designers, and is not intended for them exclusively.

Conversely, the phrase “interior design research” is a narrower term that implies research conducted in or about interior design, for or by interior designers. For example, a

post-occupancy evaluation (POE) of a recently built interior environment, conducted by an interior designer, would be considered to be “interior design research.” For this study, the term, “research in interior design” is appropriate because it is broader and leaves open the possibility that some of the research used by interior designers is actually created outside the profession.

The second operational definition concerns that of interior design. Although the National Council for Interior Design Qualification (NCIDQ) (2004) and other professional organizations endorse a particular definition of interior design,<sup>2</sup> a modified definition is used in this paper. For the purposes of this paper, the *practice* of interior design is considered to be *a service industry in which the goal is to produce, in ways that are ethical, effective, and efficient for both clients and designers, context-specific, evidence-based, uniquely creative spatial solutions to meet both client and end user needs*. This definition suggests that interior design consists of, and requires, at least two distinct cultures: design and research. A design culture is necessary to ensure that artistic, creative solutions prevail while a research culture is needed to ensure that design solutions are supported with research-based evidence.

The idea that interior design consists of two distinct cultures raises the need for a third operational definition – that of “culture.” For the purposes of this study, a culture is defined as *a set of attitudes, beliefs, behaviours, and practices that are embedded within, and unique to, its members*.<sup>3</sup> The operational definitions of interior design practice and culture are critical because they form the foundation for the Theoretical Framework for Research in Interior Design.

Although Chapter Five provides further explanations about the need for a balance of cultures (and actually promotes a balance between three cultures of design, research, and knowledge management), the point is reiterated throughout the document that, in their quest for a research culture, interior designers should not minimize the existing design culture. At risk in doing so is the objectification of design and the diminishment of the profession's primary cultural foundation.

The final definition is, of course, that of research. For the purposes of this dissertation, research is considered to be *a systematic and valid process undertaken for the purposes of verifying existing, or discovering new, knowledge.*

### **1.2.3 Limitations**

Like most qualitative studies, the results of this dissertation are not generalizable to all stakeholders within the interior design discipline. Essentially, this means that the results of the study may or may not be representative of all individuals who hold an opinion about the nature of interior design research.

Additionally, the Theoretical Framework resulting from the study will likely require further research so that it can be developed more fully. Further research could enable the Framework to evolve from the level of substantive to practice theory, and could also produce the kind of evidence needed in order to generalize the study findings to a larger population.

### 1.3 ORGANIZATION OF THE DOCUMENT

Figure 1 (p. 11) provides an overview of the entire dissertation by describing the contents of each chapter and the linkages between them. As indicated in Figure 1, Chapter Two reviews literature related to research stakeholders and issues. The chapter provides insight into the barriers faced by interior designers in their attempts to establish a research-based profession, and explains what a theoretical framework could do to assist in that pursuit.

Chapter Three describes how the investigation unfolded. Included are explanations about the general characteristics of qualitative research, the research methods used in the study, the process of selecting study participants, and the methods of data collection and analysis. An explanation of pertinent ethical issues is also included in Chapter Three.

Chapter Four describes two sets of findings: (a) participants' perceptions about research in interior design; and (b) a Synoptic of Themes from the literature, the data, and the theoretical memos made throughout the data collection and analysis processes. The chapter is a critical one because it describes what stakeholders in the three focal contexts (education, practice, and professional organizations) think about research. In addition, the chapter explains the eight themes that serve as the foundation for the Theoretical Framework explained in Chapter Five.

Explanations in Chapter Five center on the Theoretical Framework for Research in Interior Design. Included in the chapter are some of the theories that were considered early in the data analysis process, the rationale and goals for the Framework, the main components of the Framework, and the implications of the Framework for post-secondary interior design education programs.



Chapter Six provides an overview of the study and an explanation of the benefits of the Framework. Also included are recommendations for additional research needed to test the Framework and expand its utility.

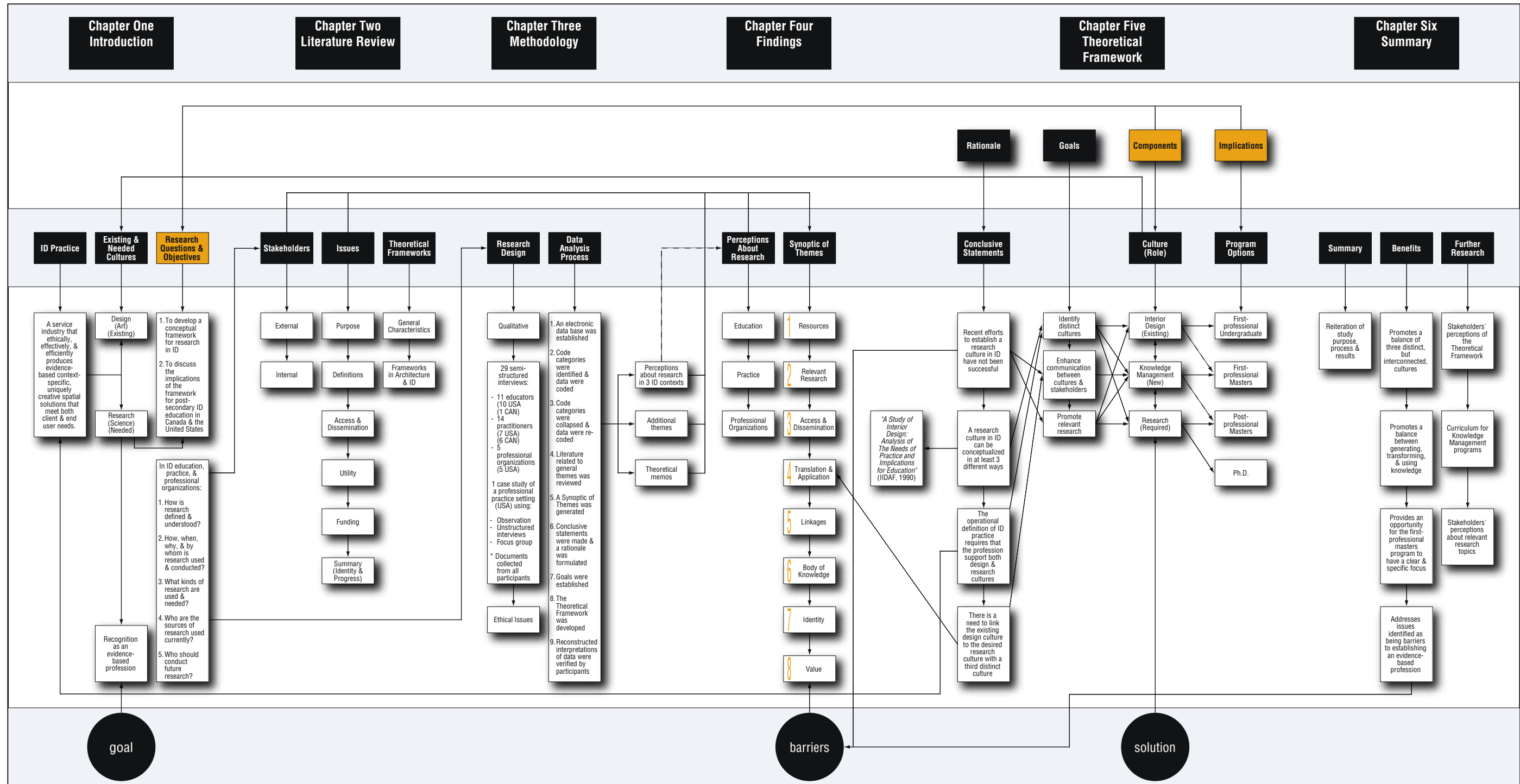


Figure 1 – Dissertation Overview



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## Notes

1. Throughout the dissertation, the terms “research-based” and “evidence-based” are used interchangeably.
2. According to NCIDQ (2004):

Interior design is a multi-faceted profession in which creative and technical solutions are applied within a structure to achieve a built interior environment. These solutions are functional, enhance the quality of life and culture of the occupants, and are aesthetically attractive. Designs are created in response to and coordinated with the building shell, and acknowledge the physical location and social context of the project. Designs must adhere to code and regulatory requirements, and encourage the principles of environmental sustainability. The interior design process follows a systematic and coordinated methodology, including research, analysis and integration of knowledge into the creative process, whereby the needs and resources of the client are satisfied to produce an interior space that fulfills the project goals.

Interior design includes a scope of services performed by a professional design practitioner, qualified by means of education, experience, and examination, to protect and enhance the life, health, safety and welfare of the public. These services may include any or all of the following tasks:

  - \* Research and analysis of the client’s goals and requirements; and development of documents, drawings and diagrams that outline those needs;
  - \* Formulation of preliminary space plans and two and three dimensional design concept studies and sketches that integrate the client’s program needs and are based on knowledge of the principles of interior design and theories of human behavior;
  - \* Confirmation that preliminary space plans and design concepts are safe, functional, aesthetically appropriate, and meet all public health, safety and welfare requirements, including code, accessibility, environmental, and sustainability guidelines;
  - \* Selection of colors, materials and finishes to appropriately convey the design concept, and to meet socio-psychological , functional, maintenance, life-cycle performance, environmental, and safety requirements;
  - \* Selection and specification of furniture, fixtures, equipment and millwork, including layout drawings and detailed product description; and provision of contract documentation to facilitate pricing, procurement and installation of furniture;

- \* Provision of project management services, including preparation of project budgets and schedules;
  - \* Preparation of construction documents, consisting of plans, elevations, details and specifications, to illustrate non-structural and/or non-seismic partition layouts; power and communications locations; reflected ceiling plans and lighting designs; materials and finishes; and furniture layouts;
  - \* Preparation of construction documents to adhere to regional building and fire codes, municipal codes, and any other jurisdictional statutes, regulations and guidelines applicable to the interior space;
  - \* Coordination and collaboration with other allied design professionals who may be retained to provide consulting services, including but not limited to architects; structural, mechanical and electrical engineers, and various specialty consultants;
  - \* Confirmation that construction documents for non-structural and/or non-seismic construction are signed and sealed by the responsible interior designer, as applicable to jurisdictional requirements for filing with code enforcement officials;
  - \* Administration of contract documents, bids and negotiations as the client's agent;
  - \* Observation and reporting on the implementation of projects while in progress and upon completion, as a representative of and on behalf of the client; and conducting post-occupancy evaluation reports. (para. 1-2).
3. "Culture" is defined by Bates and Plog (1990) as, "a system of shared beliefs, values, customs, behaviours, and artifacts that the members of a society use to cope with their world and with one another, and that are transmitted from generation to generation through learning" (p. 7).

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## Chapter Two

# Literature Review



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Chapter One introduced the idea that many interior designers are relying on research to help the profession become recognized as an evidence-based profession. This chapter provides an overview of research in interior design, and the potential value of a theoretical framework for research in interior design. The chapter begins by introducing stakeholders who have contributive interests in research in interior design. The middle portion of the chapter describes issues related to research, such as the purpose of research in interior design. The last part of the chapter describes the characteristics of theoretical frameworks. Overall, this chapter provides insight into the reasons why interior design has been unable to establish itself as a research-based profession, and how a theoretical framework for research in interior design could provide a strategy for attaining that goal.

### **2.1 RESEARCH IN INTERIOR DESIGN: STAKEHOLDERS**

Key stakeholders are those individuals, or groups of individuals, who stand to benefit from a research-based profession and who also have important roles to play in promoting, conducting, using, disseminating, and funding

research in interior design. In short, these external and internal stakeholders are the people who will establish the research culture needed in interior design.

### **2.1.1 External Stakeholders**

External stakeholders include governments, universities, industries, allied disciplines, design clients, and end users of designed environments. Interior designers presently face a great deal of pressure from these stakeholders to produce research. Universities, governments, and funding agencies are increasingly demanding that educators conduct multidisciplinary, innovative research which will contribute to the well-being of society, and result in knowledge, products, or services that can be marketed within the knowledge economy (Government of Canada, 2001; White & Dickson, 1996; Zube, 1980).

Universities are interested in gaining the reputational status and associated economic benefits that result from research (Mayo, 1991). Industries related to interior design stand to profit from research in interior design because increased business for the profession translates into increased business for industries. Allied disciplines are relying on interior designers to contribute research-based knowledge to multi-disciplinary team efforts that address the increasingly complex types of environments in demand today (Groat & Wang, 2002; Sutton, 1992; Whitman, 2003). Clients are demanding research-based evidence that their profits will increase as a result of design, or that they, their employees, or their customers will benefit in some way from design services (Heerwagen, 2002a). Finally, end users today expect environments to be designed in ways that meet their increasingly complex needs for functional, safe, and

aesthetically-pleasing spaces, whether those environments are residential, workplace, healthcare, or educational facilities. All of these groups have high expectations and much to gain from research in interior design.

In addition to the various expectations held by external stakeholders, these stakeholders also have important contributions to make in terms of supporting research in interior design. Governments, for instance, can contribute not only by funding interior design research, but also by recognizing interior design as a legitimate service industry. Increased recognition from government would make it easier for interior designers to obtain research funding from other organizations. Universities can support research in interior design by providing resources and facilities for interior design educators to establish sustainable research agendas, and by supporting student research as well. Industries related to interior design have already provided financial support for research in interior design and, in the future, will need to continue to do so.

Clients and end users of design have extremely important contributions to make to research in interior design because they are the focus of the interior design industry. As such, clients and end users can participate in research studies by providing researchers with important information about their needs, desires, concerns, and experiences with designed environments, and experiences with designers. Clients could also provide funding for research which, in the end, would benefit not only their own particular projects, but also the interior design profession as a whole.

While external stakeholders have much to gain from research in interior design, few of them have contributed, significantly, to research in the profession. Possibly, the



lack of involvement of external stakeholders reflects a lack of strategy for involving them in interior design research. Without a strategy, external stakeholders may not even be aware of their potential roles in supporting research in interior design.

### **2.1.2 Internal Stakeholders**

Internal stakeholders include professional and regulatory organizations, practitioners, educators, and students. These organizations and individuals obviously have significant interests in research and, therefore, have the most significant roles to play to in terms of establishing a research culture within the profession.

#### **2.1.2.1 Professional and Regulatory Organizations**

In Canada and the United States, there are a number of organizations that serve interior design practitioners, educators, and students. The major organizations include the American Society of Interior Designers (ASID), the Interior Designers of Canada (IDC), the Interior Design Educators Council (IDEC), and the International Interior Design Association (IIDA).

ASID is a nonprofit professional society with over 34,500 members, the majority of whom are practitioners (ASID, 2003). Along with the University of Minnesota and numerous industry sponsors, ASID recently launched the InformeDesign Website which is a database of research abstracts related to design (see Section 2.2.3.3, p. 48). As evidenced by its own research initiatives, ASID is committed to research in interior design. ASID recognizes that research provides its members with evidence-based knowledge that can be used to attract clients and to better meet client and end user needs.

IDC is a national association established in 1975. The association comprises its membership from eight provincial associations. Although IDC does not actually conduct research, the IDC Foundation (IDCF) facilitates industry funding for interior design research in Canada. Like ASID and the other professional organizations, IDC recognizes the value of research to its members.

Founded in 1963, IDEC has approximately 675 members (ASID, 2004), most of whom are interior design educators and researchers. IDEC plays a major role in advancing research in interior design, particularly through the publication of the *Journal of Interior Design* and the recently-launched *e-JID*, which are the profession's only peer-reviewed journals dedicated to interior design research. IDEC's interest in research is evident by its members who undertake a significant amount of research in the area of education. IDEC, however, is also interested in promoting research that serves practitioners and the discipline as a whole.

IIDA was established in 1994 and has over 11,000 members who are both practitioners and educators. IIDA has made significant contributions to research by organizing industry roundtables, meetings, and a summit on the topic of research. The IIDA Foundation (IIDAF) (1999) has also contributed to research by conducting an important study called, *A Study of Interior Design: Analysis of the Needs of Practice and Implications for Education*. IIDA's interest in research is to advance the discipline as a whole.

The two regulatory organizations for interior design are the Foundation for Interior Design Education Research (FIDER), and the National Council for Interior Design Qualification (NCIDQ). Established in 1975, FIDER's mandate is to establish accreditation standards and to

assess interior design programs across North America. FIDER undertakes research for both internal purposes (e.g., developing accreditation standards), and for external purposes as well (e.g., identifying future trends for interior design). FIDER recognizes the value of research to the discipline, and the importance of research for programs struggling to gain recognition within university contexts.

NCIDQ was established in 1972, and formalized as a not-for-profit organization in 1974. The organization's mission is to set standards for, and administer, a qualifying examination that provides certification for successful candidates. In addition, NCIDQ (n.d.) offers the Interior Design Experience Program (IDEP), which provides interior design graduates with entry level work experiences necessary in order to write the qualifying examination. NCIDQ conducts extensive research in order to set the examination questions (Hammond, 2002).

Collectively, the professional and regulatory organizations have played important roles in convening practitioners, educators, students, industry, government, and other stakeholders to discuss and promote research in interior design.

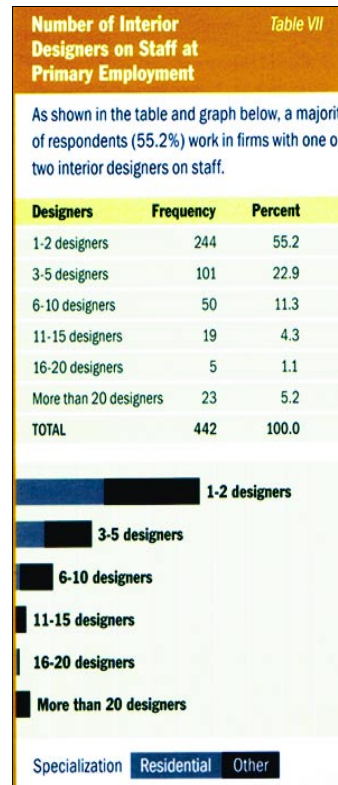
### **2.1.2.2 Professional Practice**

Despite the various statistics that exist about interior design practice (ASID, 2004; Davidsen, 2002a, 2003b; Henderson, 2003), there is no comprehensive database that provides an accurate and complete description of the full range of interior design firms or the services that interior designers provide in Canada and the United States. In part, the difficulty lies in the fact that professional interior design is not well defined and is often confused with interior decoration. Another problem that prohibits the existence of a comprehensive database is the existence of sole proprietor

firms which are particularly difficult to track.

At any rate, information from various sources suggests that professional interior design is a service industry that is evolving steadily in both Canada and the United States. Although statistics indicate that overall revenues were lower in 2003 than in 2002 (Davidsen, 2003b), the reason was attributed largely to the economic downturn in the United States. Based on information from the Bureau of Labor and Statistics (BLS), ASID (2004) wrote that, "interior design, along with other design fields, is growing at a faster-than-average rate nationally, when compared with other occupations" (p. 9). BLS suggested that the demand for services will continue until 2010, and will be driven by "the demand for design services in the residential, office, health care and hospitality arenas" (ASID, p. 9). In Canada, Human Resources Development Canada (HRDC) (1996) also reported that healthcare, ergonomics, and environments for the elderly were growing areas of interest for interior designers, and suggested that, overall, the outlook for interior design firms was positive.

NCIDQ (Henderson, 2003) reported that of 442 respondents in their practice survey, over half (55.2%) work in situations where only 1-2 interior designers are employed. One hundred and one (22.9%) employ 3-5 designers, and only 23 (5.2%) employ more than 20 designers (Figure 2, p. 22). NCIDQ also reported that 207 (46.3%) respondents (N = 447) were single practitioners while 240 (53.7%) were employed as a staff member (Figure 3, p. 23). Relying on statistics from the BLS, ASID (2004) reported that 40,670 interior designers in the United States were employed in "various design-related businesses" (p. 9). ASID estimated that another 21,000 were self-employed.

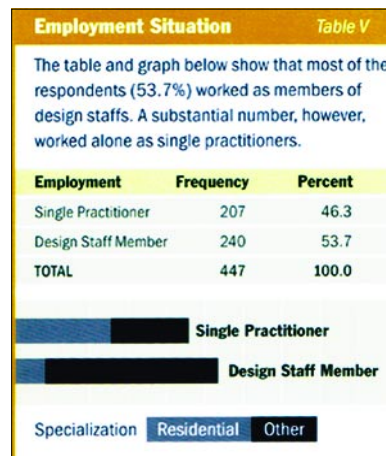


**Figure 2 – Number of Interior Designers on Staff at Primary Employment**

(Henderson, 2003, p. 12)

Interior designers take on a range of work although, again, it is impossible to know the exact numbers of practitioners working in each specific area. Nevertheless, between 2001 and 2003, *Interior Design* magazine (Davidsen, 2001a, 2001b, 2002b, 2003a, 2003b) reported that the top three types of work (as determined by fees) undertaken by the top 200 design firms in the United States were office, hospitality, and retail design. The exception to this trend occurred in the first part of 2002 when the top three types of work were in office, retail, and banks/financial

institutions. The results of NCIDQ's study (Henderson, 2003) indicated that 36.2% of the respondents (N = 426) specialized in corporate/office work, while 34% specialized in residential work. The third highest ranked specialization area was healthcare at only 5.9%. Finally, ASID's (2004) study found that the top three areas of specialization were office (81%), residential (64%), and hospitality (49%). Based on these statistics, it appears that the majority of work undertaken by interior designers in the United States<sup>1</sup> was in office, retail, hospitality, and residential design.



**Figure 3 – Employment Situation**  
(Henderson, 2003, p. 11)

Literature indicates that some design firms are expanding their traditional range of services and are now providing services in areas such as facility management, graphic and/or Web design, or business or strategic consulting. Most often, design firms that have expanded

their range of services have done so in response to changing economic conditions and changing client needs. ASID's (2004) study highlights the need for interior designers to expand beyond their traditional roles in order to meet the complex needs of clients today. ASID wrote, "Our clients need to regard us as their trusted business advisors, not just as design consultants" (p. 8).

Even though the economic situation has been better in Canada during the last few years than it has been in the United States, the situation for Canadian interior designers has been similar to those in the United States. As a result of economic circumstances, designers in both Canada and the United States have had to diversify their services. In Canada, for instance, HRDC (1996) noted the following trend:

Interior design services are expanding. Increasingly, interior designers are being asked to provide leasing, real estate, and merchandising advice. Facilities management opportunities are expanding. And there are growing opportunities for interior designers in occupational health and in ergonomics, as well as in asset management. . . . These trends will affect the makeup of interior design firms, spawning more multidisciplinary firms or alliances among firms covering the range of expertise. (p. 80)

The shift towards diverse services indicates that traditional interior design services are not adequate in terms of meeting the needs of today's clients.

#### **2.1.2.2.1 Practitioners**

Practitioners have much to gain from research. Among the potential benefits, two of the most significant are the opportunity to use research to create evidence-based design solutions, and the opportunity to use research to

demonstrate the value of design to clients and end users. Despite these potential benefits, many practitioners are skeptical about research, and are generally reluctant to either support research or to undertake research themselves. Practitioners claim that research is an obstacle to their main priority, which they define as design productivity (Hofstra, 2001).

The idea that practitioners are not enthusiastic about research makes sense since most practitioners today have not been educated in research (Thompson, 1992). Without fully understanding research, many practitioners fear that “research will take away, limit creativity, or squash team dynamics” (IIDA, 2003, p. 3). Not surprisingly, practitioners have contributed very little research to the profession. There are several reasons why: (a) practitioners consider the documentation and dissemination of research to be the role of the academics and graduate students; (b) practitioners fear that research is “too difficult, too time consuming, and too expensive” (Heerwagen, 2002b, p. 53); (c) existing research has been, at best, only marginally useful to practitioners; and (d) many practitioners do not consider their own design projects to be a form of research or knowledge worth documenting. Practitioners who do, in fact, document their projects tend to do so for internal purposes only. Dickson and White (1993) explained that the information gathered by practitioners “appears to be used solely for the purpose of solving a specific design problem and may contribute to the accumulated experience of a designer or design firm but does not become a part of the greater body of knowledge” (p. 9).

Despite practitioners’ reluctance to be involved in research, numerous individuals have suggested that practitioners have important roles to play in terms of

*“For business, the question is how can we move from idea to design as quickly as possible. Research can be seen as a detour on this path, not an outlook or a trail to a frontier” (Hofstra, 2001, p. 12).*



*“In the busy world of interior design, it is difficult for practicing designers to understand and appreciate the importance of design research to their job. Most practitioners are too caught up in the daily routine of running the office, meeting the demands of clients, keeping abreast of new product and technological advances, and exploring design ideas to realize that design research is fundamental to each of these activities” (Thompson, 1992, p. 47).*

capturing and disseminating knowledge. HRDC (1996) explained why practitioners’ contributions to the body of knowledge are important:

If each designer has to figure out what works and why, or what does not work and why not, there will be a tendency to stick with an existing range of solutions. Without published research, the knowledge of evolving best practice will not be shared across the community.

Designers must be encouraged to document the impact that their design solutions have on their clients’ organizations. (p. 162)

The results of this study, and other literature as well, support HRDC’s statement. Dickson and White (1993) wrote, “To advance the profession, the practitioner’s *primary* role is to keep abreast of current research and apply it in design solutions rather than frequently using past experience as the primary resource” (p. 10).

### **2.1.2.3 Post-Secondary Interior Design Education**

Currently, interior design programs in the United States include first-professional undergraduate and masters programs, post-professional masters programs, and Ph.D. programs. With the exception of the Ph.D., the same program types are offered in Canada. Of these programs, only the first-professional ones are accredited by FIDER. The majority of programs are situated in colleges, schools, or faculties such as human ecology/consumer sciences, architecture/environmental design, or applied arts/commercial design (ASID, 2004).

In 1989, there were 79 institutions offering accredited programs in interior design (FIDER, 1989). Today, there are 126 institutions that offer accredited programs in Canada and the United States (FIDER, 2004).

Of these, 119 are located in the United States, and the remaining seven are in Canada.

According to IDEC (1999), there are 50 institutions that offer masters level interior design programs, only one of which is situated in Canada.<sup>2</sup> Of these, eight institutions in the United States also offer Ph.D. programs. Eighteen of the 50 institutions (36%) began offering masters and/or Ph.D. programs in 1990 or later, a statistic which indicates that graduate education has gained importance since the early 1990s. Of the accredited institutions, approximately 33 (26%) are known to be research universities. This indicates that just over a quarter of the total number of institutions offering interior design programs are committed to conducting research.

Stakeholders in the education context include educators, undergraduate, and graduate students. Each of these groups has unique research interests and unique roles to play in terms of promoting research within interior design.

#### **2.1.2.3.1 Educators**

Interior design educators who teach at research universities are likely to conduct research not only because it is a requirement for tenure and promotion, but also because of a genuine interest in advancing the profession. Typically, educators publish their work in peer-reviewed journals, write books or book chapters, and present their research at conferences both inside and outside the profession.

Educators in teaching-intensive universities may not be as committed to producing research but likely rely on research to inform their teaching. Guerin and Birdsong (1995) assert that heavy teaching loads often hinder research efforts by even the most motivated educators. Guerin and Birdsong, and HRDC (1996) also suggest that many interior design educators do not conduct research

*“... faculty spend a significant number of hours in studio courses. Additional lecture courses also comprise part of their assignments. With these heavy teaching loads, it is difficult to keep up a traditional research agenda” (Guerin & Birdsong, 1995, p. 44).*

because they do not have the skills needed to conduct formal research, or because they were hired for their expertise as practitioners rather than for their expertise as researchers.

ASID (2004) reported that, of the total full-time faculty in FIDER-accredited three-, four-, five-, and six-year programs (N = 581), 53 (9%) have earned a Ph.D., and 192 (33%) have earned a masters degree. Consequently, at least 245 (42%) full-time faculty in FIDER-accredited interior design programs have a potential background in research (although some of the masters programs may have been first-professional degree programs and may not have emphasized research). In Canada, HRDC (1996) commented that, “As faculty members retire and are replaced, some schools are making appointments based on research and academic credentials” (p. 103). Possibly, this trend indicates the desire of the design disciplines to meet university and external stakeholders’ demands for increased levels of research.

To date, educators have probably been the most persistent group of stakeholders to promote research in interior design. Not only do they conduct and disseminate research themselves, but they also educate students, practitioners, and other stakeholders about the importance of research in the profession. In the future, educators will continue to play similar roles. Dickson and White (1993) maintain that, “The educator’s *primary* role is to advance the profession through the generation of research that adds to the body of knowledge, to place this research into a contextual framework that can be used by the design profession, and to convey the existing body of knowledge to students” (p. 10).

### **2.1.2.3.2 Students**

Interior design students can be classified into four different groups: (a) first-professional undergraduate, (b) first-professional masters, (c) post-professional masters, and (d) Ph.D.. Students in each group have different interests and roles to play with regard to research.

Unfortunately, little literature exists about the nature of students within interior design programs. However, based on personal experience and on the findings described in Chapter Four, a few general statements can be made about the relationship between students and research. Typically, first-professional undergraduate students tend not to be interested in either using or conducting formal research. Instead, they are more interested in learning the knowledge and skills needed to practice interior design. First-professional masters students are also interested in learning the skills necessary for practice, but they recognize the need to both use and conduct research as well. Post-professional masters and Ph.D. students are similar to educators in that they are usually highly motivated to both use and conduct formal research.

Students directly benefit from research because they use it in their assignments, projects, practicums, and theses. Indirectly, students benefit from the research that educators use in the courses they teach. All students would also benefit from increased recognition that the profession would gain by becoming more research-based.

Traditionally, it was primarily graduate students who were expected to conduct research. Increasingly, however, students at the undergraduate level are also being encouraged to undertake research (Franklin, 1987; Gibson, 1994; Martinson, 1998). Participants at an IIDA Roundtable (1998a) suggested “that the interior design school

curriculum should include the subject of real research -- the generation of new knowledge -- at the undergraduate level” (para. 2). Although, in principle, the idea of including research in the undergraduate curriculum is admirable, explanations are provided in Section 5.2.1 (pp. 174-177) as to why such an idea may not be appropriate for interior design.

Even though the professional and regulatory organizations, as well as practitioners, have important roles to play in terms of promoting research in interior design, it seems clear that almost all stakeholders are relying, primarily, on educators and graduate students to assume lead roles in conducting research, contributing to the body of knowledge through research, and establishing a research culture (Dickson & White, 1994; Guerin et al., 1995b; HRDC, 1996; White & Dickson, 1994). As such, graduate students and educators are perceived to have important roles in shaping the profession’s future.

#### **2.1.2.4 Internal Stakeholders Collectively**

Contributory roles that external and internal stakeholders are expected to play in establishing a research culture in interior design have been identified thus far. Notable within the literature, however, are the frequent suggestions for partnerships between various internal stakeholders. Many authors and stakeholders suggest that stakeholders in practice and education need to work together to promote and undertake research in interior design (Ed Friedrichs as cited in Cutler, 2001; Dickson & White, 1993; Drab & Thompson, 2000; Guerin et al., 1995a; IIDA, 1998a, 2000; Thompson & Guerin, 2002). Dickson and White, for instance, wrote that “the issue of generating new knowledge to support the profession should be a primary concern of both the practitioner and the design educator” (p. 4).

## 2.2 RESEARCH IN INTERIOR DESIGN: ISSUES

Besides the descriptions of stakeholders provided so far, there are a number of relevant issues that warrant explanations. These include the purpose, definitions, dissemination, utility, and funding of research in interior design. Literature related to these issues helps understand why it has been difficult to establish a widespread research culture within the profession and, consequently, why it has been difficult for the profession to gain recognition as being evidence-based. Additional topics addressed in the summary of this section relate to interior design's identity, progress made towards establishing a research culture, and opportunities that exist for establishing a research culture.

*“When designers can support their decisions with a knowledge base, their value to society will become more readily apparent. This, in turn, should create an increased demand for design services, and the ultimate outcome should be the creation of better designed environments for a wider variety of users” (Dickson & White, 1994, p. 7).*

### 2.2.1 Research Purpose

Recurrent themes in the literature suggest that research in interior design is needed for external purposes: to demonstrate to external stakeholders the value of interior design, and for internal purposes: to define and expand the body of knowledge within the discipline. The rationale supporting these arguments is that research in these areas will lead to the legitimization of the profession, an expanded and specialized body of knowledge, professional recognition, disciplinary status, and sustainability of the profession.

#### 2.2.1.1 External Research Purposes

The need for research that demonstrates the value of design to external stakeholders is usually described in one of three ways: (a) as research that rationalizes design decisions and the design process (Dickson & White, 1993, 1994; Drab & Thompson, 2000; Frankel, 1999; Hasell, 1993; Heerwagen, 2002b; IIDA, 2000; Thompson, 1992); (b) as research that demonstrates the value of design (Frankel, 1998b; Guerin, 1992; Weinhold, 1996); or

(c) as research that demonstrates the economic benefits of design (Beckman, 2001; Carlos de Falla as cited in Dickson & White, 1994; HRDC, 1996; IIDA, 1998b). Proponents of these topics suggest that such research in these areas will lead to the legitimization, rationalization, and de-mystification of the design profession which, in turn, will lead to increased value for the profession.

#### **2.2.1.1.1 Rationalize the Design Process**

The need for research that rationalizes the design process is reminiscent of the 1960s when architects spent a great deal of time and energy in attempting to objectify and de-mystify the design process. Their intent was to make the design process more transparent and, therefore, more understandable and acceptable to people outside of the design disciplines. Although architects were never able to achieve this goal, today, both architects and interior designers continue to pursue that objective.

The main reason for wanting to objectify the design process is so that clients can understand how design decisions are made. Clients want to be assured that decisions (that can cost millions of dollars) are based on evidence rather than on designers' expertise alone. Practitioners need this kind of research so that they can "tell a client, 'When we do X, Y will happen!'" (Drab & Thompson, 2000, p. 46). Designers need to be accountable, back up their work "with hard facts about anticipated results" (Frankel, 1999, para. 3), and be able to enhance professional confidence by being able "to predict accurately for clients/users the range of consequences of certain design decisions" (Hasell, 1993, p. 1). Any research that can assist designers in achieving these goals would be beneficial. To date, however, the published literature contains few examples of such research.

### **2.2.1.1.2 Demonstrate the Value of Design**

Research that demonstrates the value of design has also been sparse, despite the abundance of suggestions that such research be conducted. The few research studies done on the topic have focused on the value of design within: (a) the workplace (ASID, 1996; Williams & Associates, 1997, 1998, 1999); (b) healthcare environments (e.g., the Center for Health Design's "Pebbles Project"); and (c) higher education institutions (Gates & Ali, 1996; White & Dickson, 1996).

White and Dickson (1996) stated that, "Although those of us who have been educated in interior design may understand our unique role in improving the quality of life and sustaining the health, safety, and welfare of the public, these contributions are not always understood by university administrators who are making decisions regarding program survival" (p. 27). Later in their discussion, White and Dickson posed this question: ". . . if the interior design profession as a whole is not able to articulate its value and worth, how can we expect others to understand our true merit and contributions to society?" (p. 36). Gates and Ali (1996) addressed this question with the finding that research done in universities is an important way of demonstrating what interior design is and what design contributes to society. They also noted that helping external stakeholders (the public, legislators, foundations and corporations) understand the value of design "will garnish critical support and resources" (Gates & Ali, p. 48).

### **2.2.1.1.3 Demonstrate the Economic Benefits of Design**

Besides the need for research that rationalizes the design process and that addresses the overall value of design, many authors also claim that research is needed to demonstrate the economic value of design. For example,

*"The continuance of the profession depends on how much our services are valued. Nobody is going to come to us just because we can put together a pretty space. We must be able to justify our expenses"*  
(Carlos de Falla as cited in Dickson & White, 1994, p. 7).



*“It stands to reason that if the economic benefits of design can be quantified, then Canadian business would make greater use of design. But even the most rudimentary analysis of design’s impact on the economy is missing” (HRDC, 1996, p. 103).*

HRDC (1996) suggested that empirical research on the economic benefit of design would result in greater numbers of people seeking design services. Sara Beckman (2001) noted the lack of actual research studies on the economic value of design. She wrote, “There are now many stories of the use of design in business, but few include hard data on the financial performance improvements that are associated with design” (p. xi). Like other stakeholders, Beckman advocates for design and business schools to do “research to document the role of design in business and to assess its contribution to bottom line performance” (p. xiv).

To date, research done on the economic value of interior design has been minimal. Perhaps the most well-known research has been that conducted by the Buffalo Organization for Social and Technological Innovation (BOSTI) Associates (Brill, Weidemann, & BOSTI Associates, 2001) in the area of office productivity. Other studies (mentioned earlier) also addressed the issue of productivity within the work environment as a means of demonstrating the economic value of design. Beyond workplace productivity, however, there appear to be few studies about the economic benefits of interior design.

### **2.2.1.2 Internal Research Purposes**

#### ***2.2.1.2.1 Establish A Distinct and Expanded Body of Knowledge***

Internally, one of the main reasons for conducting research in interior design is to develop a distinct and expanded body of knowledge. From the viewpoint of many internal stakeholders, research that contributes to a unique, comprehensive, and substantial body of knowledge is considered to be a critical endeavour. Such a body of knowledge would enable the profession to gain highly prestigious Practice Act Legislation (which designates

professional recognition), and to achieve disciplinary status (a key defining characteristic of a discipline), among other benefits. While most stakeholders do not dispute the need for recognition and disciplinary status, some stakeholders have questioned whether or not the creation of a distinct body of knowledge is the best way to achieve those goals.

Dr. Denise Guerin, a professor at the University of Minnesota and a frequent contributor to the *Journal of Interior Design*, along with various colleagues, has undertaken a significant amount of work in attempting to define interior design's body of knowledge. Guerin's most recent effort was a study for the Association of Registered Interior Designers of Ontario (ARIDO) called, *The Interior Design Profession's Body of Knowledge: Its Definition and Documentation* (Guerin & Martin, 2001). In their study, Guerin and Martin concluded that the interior design body of knowledge consists of the following seven domains: (a) codes; (b) communication; (c) design; (d) furnishings, fixtures and equipment; (e) human needs, (f) interior building construction; and (g) professional practice. At the core of these seven domains is the public's health, safety, and welfare.

Besides the body of knowledge topics that Guerin and Martin (2001) identified in their study, the reason they were commissioned to undertake the study is important as well. The study was undertaken so that ARIDO "could begin the legislative process of securing a practice act for interior design practitioners in Ontario, Canada" (Guerin & Martin, p. 6).<sup>3</sup> The authors noted that, "The key factor in attaining legal regulation of interior design practice is to provide documentation that interior designers affect the life, health, safety, and welfare of the public" (Guerin & Martin, p. 6). It seems, then, that one of the motivating factors for

*"One of the first items requested by legislators is evidence that the profession impacts the health, safety and welfare of the public" (Jensen, 2001a, p. 150).*

*“Interior design programs must do a better job of making their relevance and importance to the university’s mission understood by administrators and the public if they are to thrive in institutions of higher education” (White & Dickson, 1996, p. 25).*

establishing a distinct body of knowledge is to gain Practice Act Legislation, and not necessarily to provide researchers with guidance about what kinds of topics require research, despite the fact that the latter is certainly another benefit of having a distinct body of knowledge.

In addition to needing a body of knowledge for legislation purposes, some individuals claim that a distinct and substantial body of knowledge is essential for achieving disciplinary status. Paraphrasing the work of Abbott (1988), Thompson and Guerin (2002) wrote that:

. . . specialized or abstract knowledge is the true signpost of a profession, and . . . professions define their jurisdictional boundaries through control of this knowledge and [these] skills sets. This specialized knowledge, in most cases, is derived from research conducted by academicians and is what builds and defines the profession’s body of knowledge. (p. 3)

Others concur that a separate and distinct body of knowledge is a defining characteristic of any profession (Drab & Thompson, 2000; Giard, 2001; Hasell, 1993; IIDA, 1998a).

Finally, an expanded body of knowledge and research are perceived to be means of achieving professional respect and recognition from external stakeholders, including university administrators, governments, and society (Dickson & White, 1994; Guerin, 1992; Guerin et al., 1995a; IIDA, 1997, 2000). Thompson and Guerin (2002) emphasized the importance of a body of knowledge to stakeholders within higher education:

. . . without a recognized and well-defined body of knowledge, Interior Design will continue to struggle for credibility as an academic discipline within institutions of higher education.

To solidify Interior Design's position as a legitimate academic discipline based upon a well-defined body of knowledge, research is essential. (p. 1)

Although most interior design stakeholders do not dispute the need for professional recognition, disciplinary status, and legitimization within higher education, some stakeholders question whether a distinct body of knowledge is the best, or only, way to achieve these goals.

In May 2003, practitioners, educators, and industry representatives from Canada and the United States met in an attempt to define the content and parameters of interior design's body of knowledge (Weigand & Harmon-Vaughan, 2003). According to participants, the issue that dominated the weekend long meeting was that of boundaries:

What interior design knowledge is proprietary (unique to interior design) and what is shared with other allied professions such as architecture? To what extent do we "own" a body of knowledge? If interior design knowledge is both shared and unique, then what is the process for gaining this knowledge and for generating new knowledge? (Weigand & Harmon-Vaughan, p. 64)

At the end of the weekend, participants were unable to reach "any clear consensus about what constitutes a body of knowledge for the interior design profession" (Weigand & Harmon-Vaughan, pp. 64-65).

Other authors have also raised questions about the issue of disciplinary and knowledge boundaries. Sutton (1992) in architecture, and Frankel (1998b) and Hildebrandt (2003) in interior design, all argue that a distinct body of knowledge for each discipline is not logical nor desirable, since problems in the built environment require designers

*“Real-world problems  
-- especially those related  
to the built environment  
-- are not neatly sliced into  
disciplines” (Sutton, 1992,  
p. 66).*

to draw on a large, multi-disciplinary body of knowledge. Frankel suggests that it does not matter which discipline or which stakeholder creates the knowledge that designers use. What is more important is knowing how to use the research.

Interestingly, those who argue against having a distinct body of knowledge never seem to address the issue of how to respond to legislators’ demands for documentation or evidence to show how interior designers affect the health, safety, and welfare of the public. Possibly, Practice Act Legislation is unimportant to these individuals. In support of this point, HRDC (1996) wrote that, in Canada and abroad, practitioners “are split on the issue” of whether professional regulation in the design disciplines is necessary, in part, because some practitioners believe that licensing “could hinder the evolution of a profession by creating boundaries between professions” (p. 54).

A final important theme concerning the body of knowledge is the opinion of some individuals that it should be generated from within the profession (Dickson & White, 1993; Drab & Thompson, 2000). Hasell (1993) explained that interior design stakeholders, including educators, practitioners and industry, have been negligent in creating theories that are specific to interior design. Instead, she claims that, “Much of the research and methodology that is applicable to the study of the relationship between interior space and people comes from other disciplines – history, behavioral studies, psychology, ecology, sociology, and architecture” (Hasell, p. 1). Dickson and White drew similar conclusions. They said that interior designers must take responsibility for producing research because relying on industry or other professions to produce research “further contributes to the anonymity of the interior designer” (Dickson & White, p. 5).

To date, research efforts in interior design have focused primarily on the internal needs of the profession. This internal emphasis is evidenced by the *Journal of Interior Design*, which focuses on research about education issues. The focus on internal research needs is also evident in the lack of research on the value of design, which is a topic of interest to external stakeholders. It seems that, in terms of research purpose, what is needed is a more balanced approach that supports research for *both* external and internal stakeholder needs. The Theoretical Framework described in Chapter Five provides a strategy for achieving a more balanced approach to research in interior design.

### **2.2.2 Research Definitions**

Prior to the IIDA's Research Summit at the Salk Institute in La Jolla (IIDA, 2000), Neil Frankel (1998b) wrote, "let's come together . . . to define exactly what we mean when we talk about research in the context of the interior design profession" (para. 3). Although efforts were made at the Summit to do just that, unfortunately, no such agreement was reached. Interior designers, however, are not alone in their quest for a definition of research within their profession, or for at least clarification about the nature and purpose of research within their profession.

In allied professions, such as architecture and landscape architecture, debates are ongoing about the nature of research within the professions (Benson, 1998; LaGro, 1999; Miller, 1980; Plunz, 1987; Selman, 1998; Sutton, 1992; Thwaites, 1998; Yeomans, 1995; Zube, 1980). The debates are complex and indicative of the fact that stakeholders in all of the design disciplines are unclear about what research is, and how research can be used and undertaken effectively within the design disciplines.

*“Most professional practitioners and a significant number of academic practitioners sincerely believe that they do ‘research’ as they move through design process. (However), doing a bit of pertinent reading, a limited analysis of the project at hand, and a subjective sorting of alternatives is not true research as it is understood in most disciplines. In general these kinds of findings are not replicable, valid, or reliable” (Cameron Man as cited in Miller, 1980, pp. 12-13).*

Disagreement exists in the design professions because of two very different opinions about what research is and how it should be conducted. On one hand, some individuals believe that even though there may be similarities between research and design, the two are distinct activities or processes. On the other hand, some individuals believe that design is a unique kind of research: design research.

### **2.2.2.1 Design and Research are Distinct Activities**

Although some stakeholders acknowledge that there are similarities between design and research or that research and design should be complementary, these individuals maintain that, for the most part, design and research are, and ought to remain, distinct activities (Dickson & White, 1993; LaGro, 1999; Miller, 1980; Thompson, 1992; Zube, 1980). Many of these authors suggest that it is usually practitioners and students who fail to realize the difference between design and research because practitioners and students tend to equate the information gathering done in design with data gathering done in research. This misunderstanding often occurs because similar techniques (e.g., survey, interview, observation) are used in both design and research (Heerwagen, 2002b).

In landscape architecture, LaGro (1999) stated that the analytic activities of design (e.g., the collection and analysis of information about site and precedents), although important, “are not equivalent to either qualitative or quantitative research – at least as these activities are commonly understood by scholars in other disciplines” (p. 181). Sutton (1992) claimed that architects are unwilling to “recognize research as a rigorous enterprise quite distinct from the information gathering associated with design” (p. 66), an idea echoed by Dickson and White (1993). In interior design, Dickson and White explained why such

misunderstandings about research may exist:

In the classroom setting, educators often use the term “research” when students are asked to investigate solutions or gather data from “soft” sources during the design process. Thus, the student – soon to be professional – comes to think of research in terms of these sources. (p. 9)

Numerous authors claim that part of what distinguishes research from other activities, such as design and inquiry, is the use of objective methods of data analysis (Groat & Wang, 2002; LaGro, 1999; Sutton, 1992). Design researchers who lack formal education or training with regard to research methods, or who may have been educated in “design research” methods (see explanation in Section 2.2.2.2), often fail to follow the protocols established in research methods in other disciplines (Miller, 1980; Zube, 1980). Dickson and White (1993) asserted that unless the process and findings can be verified and replicated, design is not research.

### **2.2.2.2 Design is A Unique Kind of Research (Design Research)**

The idea that “design is research” has been discussed by authors in related disciplines including architecture (Plunz, 1987; Yeomans, 1995), and landscape architecture (Benson, 1998; Selman, 1998; Thwaites, 1998). Often, the word “research” is combined with the name of a specific profession to create what appears to be a unique kind of research like “architectural research,” “landscape research,” or “interior design research.” Sometimes, the more general term, “design research,” is used to refer to research undertaken in any, or all, of the design disciplines. At times, the way these terms are used suggests that research in the built environment disciplines is different from



research in other disciplines in terms of topics or methods. At other times, it is unclear exactly what is meant by the hybrid terms.

The Initiative for Architectural Research (IAR) (2002), for instance, provides the following definition of “architectural research”:

Architectural research efforts are those that have clearly identifiable goals at the outset of the research, where the project is directed to respond to a question.

In pursuing that question, one follows a credible, systematic method or mode of inquiry, relevant and acceptable to the research domain in which one is operating.

The process results in significant results laid out in a thorough, documented manner which reflects a solution or enhances understanding/knowledge with the research domain. (para. 1)

In this quote, it is unclear as to whether the IAR is promoting architectural research as a formal research method like in the social sciences or other disciplines, or as a type of research unique to architecture. The uncertainty is caused by the fact that the word “research” is preceded with the word the “architectural,” and by the fact that the definition of research seems to be similar to descriptions of research in disciplines outside of architecture or design.

Similarly, in an interior design context, Thompson (1992) states that:

. . . design research is the identification of important design questions and the development and use of organized problem-solving methods. It is a process for seeking and finding answers.

The objectives of design research are many and varied, but primary among these are (1) to predict behavior, (2) to verify patterns, and (3) to validate decisions. (p. 47)

Thompson's description of design research is similar to the kind of formal research described in other disciplines; yet it is referred to as "design research." Again, it is not clear what is really being promoted by this description. Does it advocate formal research methods in a design context, or a entirely unique kind of research?

Clearly, some stakeholders believe that the design disciplines require a unique form of research. Larry Keeley, President of the Doblin Group in Chicago (as cited in Mitchell, 1996), suggests that design needs to assert "its own kind of research, research that is particularly thought about in the context of a design process and the questions and needs of thoughtful designers interested in those insights" (p. 136). He believes this is necessary because the way research "is conventionally done . . . violates the spirit of the enterprise of design" (Keeley as cited in Mitchell, p. 136). Similarly, Yeomans (1995) calls for "architecture to have the self confidence to develop its own discipline," and to establish "some clear definition of design-based research and then some criteria for its assessment" (p. 14). Presumably, design research would be designers' "own kind of research."

Frank Duffy (as cited in Cutler, 2001) attempted to explain what makes design research different from research in other disciplines. Duffy said:

There is something very contemporary and very important intellectually about the nature of design research. It is inherently related to contextual factors and political factors . . . [and] therefore, it is more

*“... apparent increases in research may be more the result of smoke and mirrors than any substantive gains in knowledge. Presto: More research by simply defining whatever one does as research, perhaps inserting words such as ‘action’ or ‘design’ or ‘holistic’ before ‘research.’ This addition of adjectives obfuscates the issues and serves as a smoke screen for work that other disciplines would reject for lack of rigor” (Chenoweth, 1992, p. 47).*

complex and more difficult to report and to transmit. For a long time, we were caught up in trying to do environmental research using a scientific model, reducing relationships to single pairs of variables in very complex situations. Of course this was a pointless activity and wasted a lot of research money. It has been a practical, intellectual, and operational problem for a long time. An alternative methodology and an alternative series of approaches are needed” (p. 34).

Duffy’s explanation of design research is vague and this characteristic allies it with other descriptions of design research by authors in industrial design, graphic design, and other design professions (Buchanan, 2001; Cross, 1999; Owen, 1997; Roth, 1999; Seago & Dunn, 1999). In fact, Richard Buchanan (as cited in Roth) wrote:

No one seems to be sure what design research means. Should design research follow the model of traditional academic disciplines, or should it seek a new model, based on the intimate connection among theory, practice, and production that is the hallmark of design? (p. 19)

Given Buchanan’s (as cited in Roth, 1999) statement, it seems fair to conclude that, at present, the concept of design research is ill-defined, and seems to be nothing more than a convenient term for the merging of design and research. As such, advocates of design research likely will continue to struggle for validation and acceptance by researchers in other disciplines and by external stakeholders who understand research in more traditional or formal ways. Again, Section 5.2.1 (pp. 174-177) explains why research in interior design should conform to the research traditions that exist in other disciplines, rather than conform to the

nebulous concept of design research.

### **2.2.3 Access and Dissemination**

The following discussion of access and dissemination addresses reasons why: (a) interior design researchers have limited opportunities for disseminating research, (b) practitioners rarely disseminate research or knowledge, and (c) practitioners have limited access to research.

#### **2.2.3.1 Limited Opportunities for Disseminating Research**

For interior design researchers, there are limited options for disseminating research. Currently, IDEC publishes, biannually, the only peer-reviewed journal dedicated to interior design, the *Journal of Interior Design*. Recently, IDEC also launched the *e-JID*, an online publication with different content than the *Journal of Interior Design*. Since both publications are sponsored by IDEC, the topics within them focus mainly on research related to education. Other peer-reviewed journals exist in design professions outside of interior design, and interior designers do, in fact, publish in them. For instance, according to the IIDA (1998a), “Current research [relevant to interior design] can be accessed in the following publications: *The Journal of Interior Design*; *Environment and Behavior*; *Journal of Architecture, Planning and Research*; *Healthcare and Color*; [and] *The Psychology of Health Care Design*” (para. 8).

#### **2.2.3.2 Practitioners’ Reluctance to Disseminate Research**

While interior design researchers have limited opportunities to disseminate their research findings, practitioners do not. Practitioners can publish knowledge about design projects in any one of the numerous trade

*“Designers must be encouraged to document the impact that their design solutions have on their clients’ organizations” (HRDC, 1996, p. 162).*

magazines that exist including *Interior Design*, *Interiors & Sources*, *Canadian Interiors*, *Interiors*, and many others. Factors that prevent practitioners from disseminating information are: (a) they do not have the time to document and disseminate project information; (b) many consider such information to be proprietary (Szenasy, 2000); or (c) their clients will not allow them to release projects details to the design community or to the public at large. Comments made by participants at an IIDA (2003) Advisory Council meeting confirm these reasons:

Your firm, practice, or company believes it has developed a niche, or a market only you can nurture, serve and maximize. We feel sharing research, application methods and results would jeopardize our uniqueness. We believe it is the research alone that will set us apart.

We worry the “competition” will create a better solution with the knowledge than we are capable of inventing. (p. 3)

Frank Duffy (as cited in Cutler, 2001) suggests that practitioners have a responsibility to document and disseminate project information. Duffy argues:

. . . there is an enormous amount of data about building technology in practice that is wasted. It falls to the floorboards all the time because it’s not part of a project and so it gets lost. Harnessing that lost information and making it public is something that we have got to be much, much, much tougher about. (pp. 31-32)

Some practitioners recognize the responsibility they must take in contributing to the profession’s knowledge base. For example, participants at the IIDA Practice Roundtable (1998a) concurred that:

. . . sharing information from firm to firm will ultimately raise the bar of performance in the industry and strengthen the value of design. This attitude requires firms to first overcome fears of losing what was once perceived as their competitive advantage. There is a significant distinction between accumulating research and application of research. It is less an issue of who has the information than of how to apply the knowledge that ultimately creates the competitive advantage. (para. 6)

While not all practitioners agree with the remarks made by the IIDA Roundtable participants, changing attitudes within the profession provide hope for a research culture, or at least for a culture of knowledge sharing.

The idea of sharing knowledge is important in establishing a research culture. At the same time, it seems that interior designers have not done a good job of sharing information with each other (IIDA, 2000). For instance, Susan Szenasy (2000) commented that despite the research being done in practice, education, and industry:

Unfortunately there's almost no substantive conversation going on between the three factions; very little of the valuable information each holds is shared between practitioners, academics, and industry. The designers don't read academic papers, complaining that the texts are too long, too obscure, too difficult, not really relevant to the work at hand -- besides, they're hard to find. The academics, at least those who were at the summit, got downright hostile when it was suggested that their work be translated, made into digestible chunks of useful information. (pp. 14-15)

Besides Szenasy's observation of the lack of communication between interior design stakeholders, she raises two other important issues. One is the perception of practitioners that research conducted by educators is obscure and irrelevant. The other is that formal research may need to be translated so that it is more useful to practitioners. These ideas are addressed shortly in Section 2.2.4 (pp. 49-52).

### **2.2.3.3 Practitioners' Limited Access to Research**

A final point related to the issue of disseminating research is that of accessing research. For practitioners, access to research is perceived as being particularly problematic. Participants at an IIDA Roundtable (1998a) "agreed that there is a need to establish standard platforms -- places to look for information and research such as Websites, research consultants, organizations and associations, universities, and journals that are acknowledged resources and accessible to the design community" (para. 4). To some extent, access to research has improved since ASID and the University of Minnesota jointly launched the InformeDesign Website (<http://www.informedesign.umn.edu>). Although the site does not provide opportunities for disseminating original research, it does provide free access to abstracts of research that has already been published in a variety of peer-reviewed journals.

The lack of opportunities for researchers to disseminate their research, the unwillingness on the part of practitioners to document and disseminate their practical knowledge, and the difficulty practitioners have in accessing research-based knowledge are important factors that contribute to the lack of research culture within the profession. Again, these factors are taken into account in the Theoretical Framework described in Chapter Five.

## 2.2.4 Utility

Susan Szenasy's (2000) comments about how practitioners perceive formal research to be "obscure" and "not really relevant to the work at hand" unless it is translated "into digestible chunks of useful information" (pp. 14-15) foreshadow ideas that are critical in the Theoretical Framework for Research in Interior Design. These ideas are the focus of the issue of utility.

*"... research presently conducted by interior design educators is not highly valued by practitioners" (Dickson & White, 1993, p. 9).*

### 2.2.4.1 Practitioners' Perceptions About Research

The word "utility" refers to the usefulness of research and, specifically, how useful research is to interior design stakeholders. Literature indicates that stakeholders who are not trained in formal research methods often have difficulty understanding research because the language and vocabulary seem foreign. As a result, designers, in particular, tend not to use research findings to make informed decisions (IIDA, 1998a). Dickson and White (1993) found that, "47% or more of the respondents [practitioners] indicated that they never consulted scholarly journals in their research process" (p. 8) because "research as presented is not easily usable or in an understandable form for the design practitioner" (p. 9). Instead of using formal research from journals, practitioners frequently rely on knowledge from product catalogs, design magazines, *Architectural Graphic Standards*, and books in the individual's or firm's library. For designers, these sources are easier to access and understand than formal research (Dickson & White).

Numerous individuals suggest that research should be transformed into a language that can be understood by stakeholders who are not trained in formal research methods, and who are not interested in learning about such methods (IIDA, 1998a, 2003; Szenasy & Johnson, 2000;



*“Practitioners are less interested in the methodology of the research and more interested in the findings of the research which validate and promote design decisions” (IIDA, 1998a, para. 5).*

Zube, 1980). Neil Frankel (1998b) said:

Let’s encourage the design research community to translate the results of its work into clear, concise language that we can understand. Even better – let’s encourage researchers to translate their findings into visual language whenever possible. By communicating to us clearly about their work, academics and industry researchers will help us communicate the value of research to our clients. The end results will be a broader definition of design, enhancement of the inherent value of interior design, and a new perception of designers as professionals. (para. 9)

Research that is transformed into layman’s or visual languages would enable practitioners to be able to understand and, therefore, apply the results of research to their decision-making processes. The end result would be the kinds of evidence-based design solutions advocated for in the literature.

#### **2.2.4.2 Basic Versus Applied Research**

In addition to difficulty understanding the methods and vocabulary of formal research, many practitioners do not find research to be useful because the topics and types of research do not address the everyday problems that designers face in practice. Dickson and White (1993) found that when compared to research conducted by others, practitioners rated research conducted by interior design educators and social scientists as the least important (63% and 45% respectively). Conversely, research conducted by industry was considered to be “very important” (85%) (Dickson & White, p. 8). According to Dickson and White, the top three topics mentioned by practitioners as areas in which more information needed were, “1. the

interrelationship of design and behavior; 2. cost-efficient design solutions; 3. interior air quality and environmental concerns” (p. 7).

One of the main reasons why practitioners do not value research that exists in interior design is because much of it has been undertaken by educators and graduate students who tend to focus on theoretical topics and use exploratory or basic research methods. While basic, exploratory, or theoretical research is essential for establishing a knowledge base, gaining professional recognition, and ensuring the long-term existence of the profession (Dickson & White, 1994; Guerin, 1992; HRDC, 1996; Miller, 1980), practitioners require applied research that will help them, in the short-term, solve everyday or immediate problems.

Practitioners’ needs for applied research are consistent with what seems to be a trend within academic institutions and governments today (Government of Canada, 1999, 2001; President’s Committee of Advisors on Science and Technology [PCAST], n.d.; Zeman, 2002). External stakeholders want, not only from interior design researchers but from researchers in all disciplines, research that contributes to the knowledge economy, and to the solution of practical, everyday problems. Dickson and White (1993), Lawson (1992), and Miller (1980) support the idea of applied research and acknowledge the fact that there may be “voids in the knowledge base in areas of information most needed by design practitioners” (Dickson & White, p. 9). At the same time, Dickson and White suggest that practitioners fail to recognize the importance of establishing a theoretical knowledge base. They wrote that “new information does not always have a specific use at the time of ‘discovery’ but becomes of value at some future point” (p. 9).

To meet the expectations of both external and internal stakeholders, it seems that both basic and applied research need to be conducted. Basic research will help build the discipline's theoretical knowledge base (Dickson & White, 1994; Guerin, 1992; Miller, 1980), and applied research will not only help practitioners solve practical problems (Hawkes, 1995; Zube, 1980), but will also contribute to society at large (Government of Canada, 2001; HRDC, 1996).

It is difficult to establish a research culture when a major group of stakeholders (i.e., practitioners) cannot understand, do not use, and do not value research produced by other stakeholders in the profession. In architecture, Whitman (2003) reported that one of the State Chapters of the Royal Australian Institute of Architects (RAIA) found that:

. . . there existed a significant schism between the knowledge needs of practice, and the research activities currently underway in the universities. This situation, along with a perceived absence of any strong research culture amongst practitioners, was felt to be undermining the quality of architectural production. (pp. 4-5)

Certainly, these comments seem to describe the situation in interior design. The Theoretical Framework described later actually promotes a balance between basic and applied research, thereby resulting in research that meets the needs of a wider range of stakeholders.

### **2.2.5 Funding**

The lack of funding for research in interior design is the final issue that has hindered the establishment of a widespread research culture in interior design. The lack of funding for research is primarily due to the fact that the

profession is not valued by external stakeholders (John Meunier and Beth Harmon-Vaughan as cited in Cutler, 2001; IIDA, 2003). This lack of value is partially due to the fact that a large portion of the research undertaken by interior design researchers is not considered to be relevant by practitioners and external stakeholders.

HRDC (1996) acknowledged the problem concerning funding in the design disciplines:

Unfortunately, support for design by the major funding organizations in Canada is either non-existent or surrounded by prohibitive obstacles. In Canada, design is not recognized as a research activity by funding agencies. Design “falls between the cracks,” in that it is not art, science, or social science, under traditional definitions applied by funding organizations. Designers seeking research funds from the Natural Sciences and Engineering Research Council (NSERC) and the Social Sciences and Humanities Research Council (SSHRC) commented that they had to manipulate their proposals to fit the criteria for funding, for design is not listed as a discipline by NSERC or SSHRC. (p. 64)

Although SSHRC (2004) is currently in the process of revising the criteria for their research grants, compared to other disciplines, funding for design research is far less substantial.

Despite interior design professional organizations' interest in supporting research, the funding they once provided seems to have been withdrawn. While ASID provides a number of student scholarships and FIDER and IDEC provide limited funding for research or special projects, generally, none of the professional organizations in interior

*“Without a new commitment of time, energy and money, research advocates will be no match for the inertia of an entire profession” (Chenoweth, 1992, p. 48).*

design offer substantial or sustained funding for research. Additionally, corporate sponsors seem to support research in facility management, rather than in interior design (Funding for Education and Research in Design, 1996).

In some respects, the issue of funding is paradoxical. Interior designers need to conduct research to gain respect from external stakeholders, but research cannot be conducted without financial support from external stakeholders. The Theoretical Framework described later provides opportunities for increased research funding in interior design.

### **2.2.6 Summary of Issues**

The point of this chapter has been to explain why a widespread research culture in interior design has been difficult to establish, or why the existing research culture is under-developed. Among the reasons reported in this chapter, two of the most critical ones are: (a) researchers' reluctance to conduct the kinds of applied research needed by practitioners, and (b) practitioners' reluctance to recognize the importance and necessity of basic research. Essentially, it seems that two of the most important stakeholder groups within the profession – researchers and practitioners -- disagree about the purpose, value, and need for research in interior design. As long as this disagreement exists, it seems unlikely that a widespread research culture can exist in interior design.

#### **2.2.6.1 Identity**

One of the reasons that disagreement exists about the purpose, value, and need for research in interior design is that stakeholders have different perceptions about interior design. One group of stakeholders, including educators, practitioners, and external stakeholders, believe that

interior design is an art-based profession in which intuition and creativity are more important than science (Drab & Thompson, 2000; IIDAF, 1999). Stakeholders who hold this opinion sometimes equate interior design with interior decoration.

A second group of stakeholders, including both educators and practitioners, believe that interior design ought to be based equally on creativity, intuition, and science (Dickson & White, 1993, 1994; Drab & Thompson, 2000; Frankel, 1999; Hasell, 1993; Heerwagen, 2002b; IIDA, 2000; Thompson, 1992). A third group of stakeholders believe that interior design is both an art and science (Jensen, 2001b), or is “a service profession, which draws upon the arts, the sciences, and business” (Dickson & White, 1994, p. 7). Yet a fourth group of stakeholders, including educators and practitioners, believe that it is impossible to put boundaries around interior design because the profession is so complex and diverse (John Meunier as cited in Cutler, 2001).

The Theoretical Framework described in Chapter Five takes into account these different perceptions about interior design by maintaining and promoting both design (art) and research (science) cultures. The introduction of a third, mediating culture, however, will ensure that more effective and beneficial collaboration occurs between individuals who subscribe to the two primary cultures, design and research.

#### **2.2.6.2 Progress and Opportunities for Establishing A Research Culture**

While the intent in this chapter has been to explain why a research culture in interior design does not exist or is under-developed, it would be unjust to not point out some of the progress made towards establishing such a culture. In fact, some of the progress made has been alluded to already in this chapter. For instance, efforts towards establishing

*“The identity of the discipline doesn’t lie at its edge. It lies in its center. At the edge, it’s going to be blurred in its relationship to other disciplines. Interior design is blurred in its relationship to architecture. It’s blurred in its relationship to industrial design. It’s blurred in its relationship to graphic design. It’s even blurred in its relationship to landscape architecture. One of my hopes and prayers is that as we mature as an institution, and we aren’t matured yet, that we will learn to accept the blurring of those boundaries. And not sort of tromp the edges of our discipline desperately keeping out the invading hoards because that’s not the name of the game”*  
(John Meunier as cited in Cutler, 2001, p. 36).

a research culture in interior design have included: (a) an increased number of graduate programs initiated since the 1990s, (b) practitioners' increasing recognition that they have roles to play in contributing to the knowledge base (IIDA, 1998a, para. 4), and (c) increased dialogue about research (Dickson & White, 1993; Fraser & Mallory, 2001; IIDA, 1998a, 2000, 2003; White & Dickson, 1994, 1996).

Opportunities for developing a research culture also exist because of the development of the Internet as an important and powerful research tool and because of the burgeoning recognition by governments and related funders of the importance of the design disciplines to the development of the knowledge economy (HRDC, 1996; SSHRC, 2004). These positive developments indicate interior design stakeholders' ongoing commitment to establishing an evidence-based profession and, therefore, gaining the recognition that the profession merits.

## **2.3 THEORETICAL FRAMEWORKS**

This study asserts that a theoretical framework for research in interior design will provide interior design with a strategy for attaining its evolutionary goal of becoming recognized as an evidence-based profession. This section explains the general characteristics of theoretical frameworks by defining them and discussing their value.

### **2.3.1 General Characteristics**

In academic literature, the term "conceptual framework" is used interchangeably with the terms "conceptual model" (Fawcett, 1998); "theoretical framework" (Merriam, 2001; Strauss & Corbin, 1998); and "substantive theory" (Camp, 2001). Generally, however, all of these

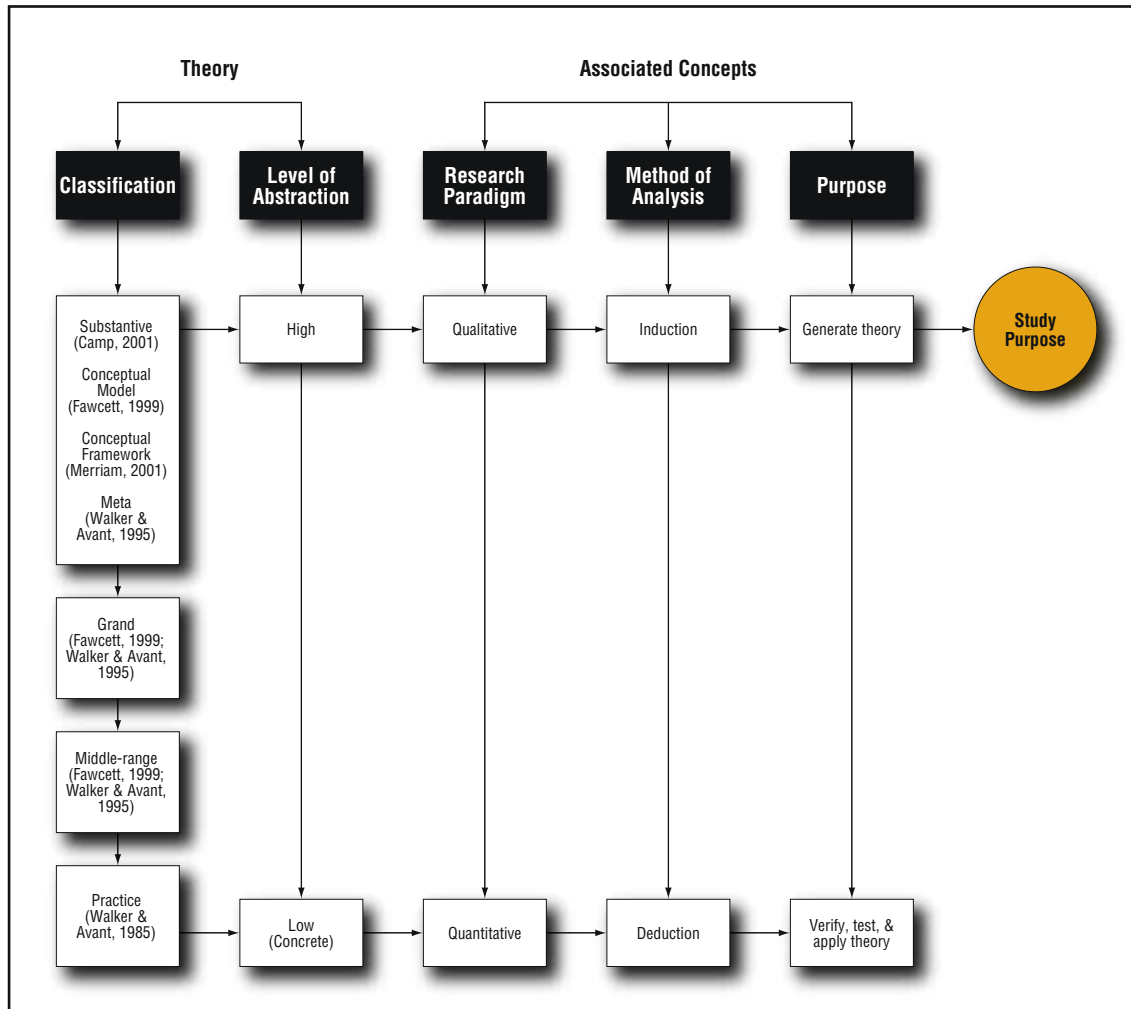
terms are based on a similar concept: theory.

Definitions of theory provided by Camp (2001), Fawcett (1998), and Strauss and Corbin (1998) can be paraphrased as follows: A theory is a set of well-defined, interrelated concepts linked together with well-explained propositions (statements of relationship). Strauss and Corbin claim that “statements of relationship explain who, what, when, where, why, how, and with what consequences an event occurs” (p. 22). Clearly, the research questions described in Chapter One, and the interview and observation guides described in Appendixes C and E, were designed to yield information about concepts and statements of relationship concerning research in interior design.

Camp (2001), Fawcett (1998), Strauss and Corbin (1998), and Walker and Avant (1995) suggest that theory can be classified in four different ways (Figure 4, p. 58). Except for the first classification, which includes a group of theory types synonymously called “substantive theory,” “conceptual models,” “conceptual frameworks,” and “meta-theory,” the other types of theory are not relevant in this particular study. They are included simply to demonstrate how theoretical frameworks fit with other types of theory. In addition to types of theory, Figure 4 illustrates the level of abstraction, research paradigm, method of analysis, and purpose associated with each type of theory. These factors are especially helpful for understanding the linkages that exist between theoretical frameworks, the purpose of this study, and the research methods used in this study.

According to Fawcett (1998), a conceptual (or theoretical) model “is a set of relatively abstract and general concepts and the propositions that describe or link those concepts” (p. 3). Camp (2001) suggests that, “Substantive theories offer explanations in a restricted setting and are





**Figure 4 – Theory Types and Associated Concepts**

limited in scope, often being expressed as propositions or hypotheses” (p. 7). Strauss and Corbin (1998) suggest that substantive theories tend to be more “specific to a group and place” and apply to a narrower range of “disciplinary concerns and problems” than more formal theories (p. 23). Given the exploratory nature of this study, the focus on research within three interior design contexts (restricted

settings, specific groups, and specific places), and the generality (abstractness) of the concepts that resulted from the study, it is reasonable to regard this investigation as an example of substantive theory (Camp; Strauss & Corbin), or as is preferred here, a theoretical framework (Merriam, 2001; Strauss & Corbin).

Strauss and Corbin (1998) suggest that the purpose of theory is “to form a theoretical framework that explains some relevant social, psychological, educational, nursing, or other phenomenon” (p. 22). Presumably, one “other phenomenon” might be interior design or, more specifically, research in interior design. Developing a conceptual framework is an appropriate objective when little knowledge exists about a topic (Camp, 2001; Fawcett, 1998), which is the situation in interior design.

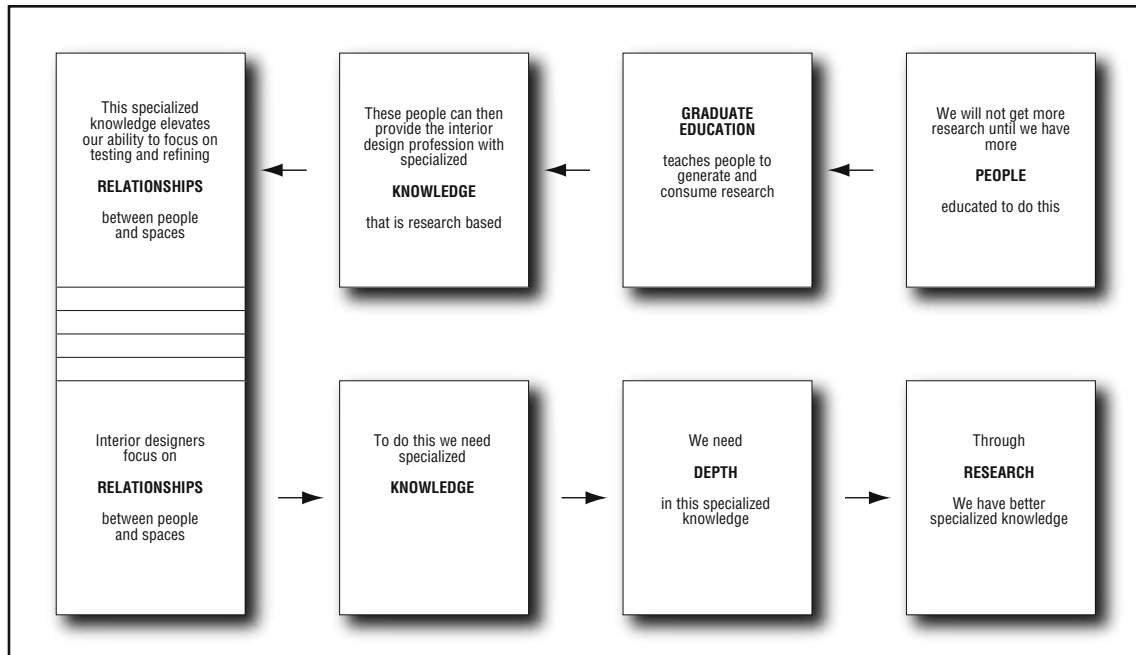
All things considered, the theoretical framework in this study was envisioned as *a well-defined, interrelated set of concepts linked together with well-explained statements of relationship that would explain who, what, when, where, why, how, and with what consequences research in interior design could be conducted, translated, used, and disseminated*. With these characteristics, the Theoretical Framework for Research in Interior Design would provide a comprehensive strategy for enabling the profession to attain its evolutionary goals.

### **2.3.2 Theoretical Frameworks for Research in Architecture and Interior Design**

Theoretical frameworks for research in interior design, with characteristics like those described in the previous section, were not evident in the literature reviewed for this study. Furthermore, in architecture literature, only one theoretical strategy was found. The strategy put forth by Rinehart (n.d.) was considered to be inappropriate

for interior design, however, because Rinehart argues for architects to, in effect, become researchers. In Chapter Five, arguments are made which suggest that educating design students in research methods is inappropriate because it causes confusion about processes and minimizes the importance of design.

In interior design, the closest resemblance to a theoretical framework for research in interior design is the model put forth by Guerin et al. (1995b) (Figure 5). Guerin et al.'s model is based on the notion that more research is the key to interior design's future, and that the way to produce more research is to have "more designers who are educated to generate, test, refine and consume research information" (para. 6). Consequently, according to these



**Figure 5 – Model of The Pathway to an Expanded Body of Knowledge**  
(Adapted from Guerin et al., 1995b)

authors, the key to more research is the existence of more graduate education. Although well-intended, the model may be unrealistic because it advocates for all interior designers to learn more about formal research, which is a potentially problematic issue that, again, is addressed in Section 5.2.1 (pp. 174-177).

The Theoretical Framework for Research in Interior Design described in Chapter Five promotes a realistic, comprehensive strategy for enabling the interior design profession to establish a widespread research culture and, at the same time, maintain its design culture. The Framework also establishes a solid foundation upon which grand, middle-range, or practice theories may eventually be based.

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## Notes

1. Of the studies cited in this paragraph, the only one that included Canadian participants was NCIDQ's (Henderson, 2003). Of the 453 participants who responded to NCIDQ's survey, however, it is not known how many were from Canada.
2. It is not clear which of these institutes or programs are accredited.
3. The IIDA (2001) states that:

A **Title Act** regulates the use of the title "Interior Designer." Only those persons that [sic] have met the statutory requirements and are registered with the state may use the title. Those who are not registered must call themselves by a different title such as interior decorator and are subject to penalty if they use the title in conjunction with their business, marketing or advertising. However, these unregistered designers can still perform their work without the title registration as long as they don't use the title.

A **Practice Act** requires anyone practicing Interior Design as described in the statutory requirements to be registered or licensed. These requirements are typically more stringent as they empower the professional to deal with the safety and welfare of the public. In some states the statute [sic] allows the registered Interior Design professional to stamp documents for permit and construction. (para. 5-6)

According to Guerin and Martin (2002), five US states have Practice Act Legislation, 15 have Title Act Legislation, and two fall into other categories. In Canada, eight provinces have Title Act Legislation.

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## Chapter Three

### Methodology



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Chapter Three describes the process by which the investigation unfolded. Explained first are the general characteristics of qualitative research, interviews, and case studies. Next, are descriptions of the interview participants and the case study setting. Procedures used to collect and analyze data, and pertinent ethical issues are explained in the latter part of the chapter.

#### 3.1 QUALITATIVE RESEARCH

Considering the study objectives and research questions described in Chapter One, as well as the linkages that exist between theoretical frameworks and qualitative research (Figure 4, p. 58), qualitative research is an appropriate methodological framework for the study. In its most complex form, qualitative research is a “constructivist” or “constructivist-interpretive” paradigm which is based on “a relativist ontology (there are multiple realities), a subjectivist epistemology (the knower and respondent co-create understandings), and a naturalistic (in the natural world) set of methodological procedures” (Denzin & Lincoln, 2000, p. 21). In simpler terms, qualitative research is that which results in “thick” descriptions of contextual situations,

everyday experiences, and social or other phenomena about which little is known (Lincoln & Guba, 1985; Stake, 2000).

*“Qualitative research is an umbrella concept covering several forms of inquiry that help us understand and explain the meaning of social phenomena with as little disruption of the natural setting as possible. Other terms often used interchangeably are naturalistic inquiry, interpretive research, field study, participant observation, inductive research, case study, and ethnography” (Merriam, 2001, p. 5).*

### 3.1.1 Characteristics of Qualitative Research

Grounded in social constructivism,<sup>1</sup> qualitative research has numerous characteristics that distinguish it from quantitative (empirical, positivist) research. Numerous researchers (Bogdan & Biklen, 2003; Lincoln & Guba, 1985; McMillan & Schumacher, 1989) state that qualitative research:

1. is conducted for the purpose of understanding the multiple meanings held by individuals within specific contexts or settings,
2. focuses on small populations,
3. assumes that the data collection “instruments” are the researchers themselves,
4. requires the use of data collection techniques such as observation and in-depth interviews,
5. requires inductive and ongoing data analysis,
6. results in thick narrative descriptions of people and their natural settings, and
7. is evaluated according to the degree to which the results are trustworthy, credible, and confirmable.

Two important and inter-related concepts in qualitative research include: (a) triangulation, and (b) criteria for evaluating qualitative research. Since the explanations about evaluation criteria make reference to the concept of triangulation, triangulation is explained first.

#### 3.1.1.1 Triangulation

In qualitative research, triangulation of methods, investigators, data sources, theoretical perspectives, or a combination of all of them, can be used to increase the credibility of a study (Denzin, 1978; Lincoln & Guba, 1985;

Schwandt, 2001). Triangulation does not imply, necessarily, a combination of three elements. Instead, the term is used to refer to the combination of two or more elements.

According to Denzin (1978), methodological triangulation can occur within- or between-methods. “Within-methods” triangulation refers to the use of variations within one research method, whereas “between-methods” triangulation refers to the use of several research methods within one study. Data triangulation is described by Denzin as a means of gathering multiple types of information about the phenomenon under study. This method of triangulation “ensures that a theory is tested in more than one way, increasing the likelihood that negative cases will be uncovered” (Denzin, p. 340). Triangulation of theoretical perspectives “involves the use of several different perspectives in the analysis of the same set of data” (Denzin, p. 340).

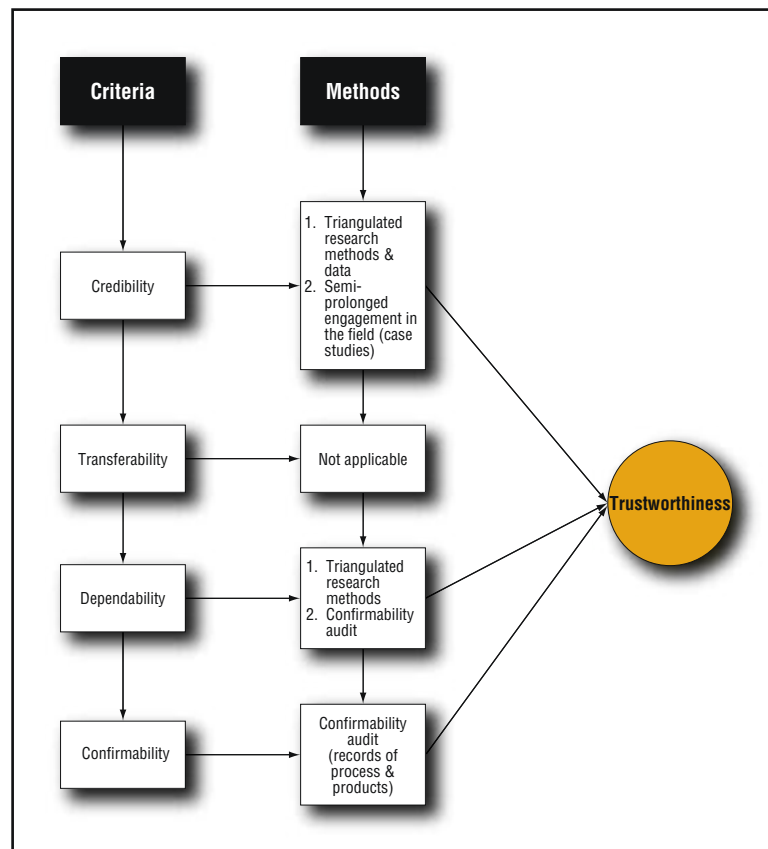
In this study, the combination of semi-structured interviews and a case study provided a between-methods form of triangulation. The combination of semi-structured and unstructured interviews, observation, documents, and a focus group provided data triangulation. Theoretical triangulation was achieved through the Synoptic of Themes generated by comparing data, literature, and theoretical memos. Triangulation of investigators did not occur in the study since there was only one researcher and thus only one data collector.

### **3.1.1.2 Criteria for Evaluating Qualitative Research**

Lincoln and Guba (1985) claim that four criteria for evaluating qualitative research include: (a) credibility, (b) transferability, (c) dependability, and (d) confirmability. These criteria help ensure that both the processes and the results of qualitative investigations are trustworthy. Figure



6 provides an overview of the criteria and the methods by which each criterion was addressed in this study.



**Figure 6 – Evaluation Criteria for Qualitative Research**

Credibility is achieved when researchers demonstrate that the reconstructed interpretations arrived at through data analysis are adequately represented, and are “credible to the constructors of the original multiple realities” (Lincoln & Guba, 1985, p. 296). Credibility can be achieved through “prolonged engagement [with study participants or in the

field], persistent observation, and triangulation” (Lincoln & Guba, p. 301). In this investigation, triangulation of research methods and data, as well as semi-prolonged engagement in the field (i.e., the case study) helped establish credibility.

Transferability is the degree to which the results of a study can be applied to other contexts or to “the same context at some other time” (Lincoln & Guba, 1985, p. 316). Interestingly, Lincoln and Guba use the concept of transferability to make the point that it is *not* the qualitative researcher’s responsibility to determine whether transferability is possible. Instead, they claim that qualitative researchers “can provide only the thick description necessary to enable someone interested in making a transfer to reach a conclusion about whether transfer can be contemplated as a possibility” (Lincoln & Guba, p. 316). Considering this statement, the degree to which the results of this study can be transferred to other contexts should not be used to evaluate trustworthiness within the context of the study.

Dependability, the third criteria for evaluating qualitative research, is automatically implied by credibility. Dependability may be achieved by “overlap methods” (methods similar to triangulation), or by an “inquiry audit,” a process of accounting for the research process and products (Lincoln & Guba, 1985, p. 317). In this study, triangulation of research methods, and the confirmability audit described next helped to establish dependability.

Relying heavily on the work of Edward Halpern, Lincoln and Guba (1985) explain that qualitative research results can be confirmed through the use of a “confirmability audit.” The confirmability audit yields evidence of both the research process and products, and is achieved through careful record keeping. In this study, a confirmability audit

*“The four terms ‘credibility,’ ‘transferability,’ ‘dependability,’ and ‘confirmability’ are, then, the naturalist’s equivalents for the conventional terms ‘internal validity,’ ‘external validity,’ ‘reliability,’ and ‘objectivity.’” (Lincoln & Guba, 1985, p. 300).*

*“Typically, qualitative in-depth interviews are much more like conversations than formal events with predetermined response categories” (Marshall & Rossman, 1999, p. 108).*

is possible since: (a) all raw data (cassette tapes, video tapes, hand written field notes, and documents collected from participants) have been stored carefully; (b) computer records exist of digital images and transcriptions of raw data, code categories, process memos, and theoretical memos (see Section 3.5, pp. 89-90); and (c) all correspondence sent to study participants (Appendixes B, D, F, and G), the protocol used to contact participants (Appendix A), and all research instruments (Appendixes C and E) have been stored carefully.

## **3.2 RESEARCH DESIGN**

Utilized as the primary research methods in this study were interviews and a case study. Descriptions of each method are provided here as are brief descriptions about the data collection techniques used in the case study.

### **3.2.1 Interview Method**

This study utilized both semi-structured and unstructured interview techniques. Semi-structured interviews were used as the primary interview technique, and were conducted with participants prior to case study research. In addition, unstructured interviews were used as a data collection technique during the case study phase of the investigation.

According to Merriam (2001), semi-structured interviews consist of “flexibly worded” questions that are designed to elicit specific information from respondents (p. 74). Merriam states that since “neither the exact wording nor the order of the questions is determined ahead of time,” the researcher can “respond to the situation at hand, to the emerging worldview of the respondent, and to new ideas

on the topic” (p. 74). In this study, this approach was appropriate since it enabled the researcher to:

(a) obtain rich information about respondents’ perspectives on the topic of research, (b) probe participants’ responses immediately, (c) ask questions in a manner and order that seemed suitable, and (d) systematically obtain data across constant categories of information (Marshall & Rossman, 1999; Patton, 1990).

Although in semi-structured interviews the potential exists for “important and salient topics” to be “inadvertently omitted” because of the ability to ad-lib at will (Patton, 1990, p. 288), in the this study, two mechanisms were employed to minimize such occurrences. First, the researcher used an interview guide, as suggested by Merriam (2001) and Taylor and Bogdan (1998). The interview guide “is a list of general areas to be covered with each informant. In the interview situation the researcher decides how to phrase questions and when to ask them. The interview guide serves solely to remind the interviewer to ask about certain things” (Taylor & Bogdan, p. 105). Interview guides, note Taylor and Bogdan, can be revised as subsequent interviews are conducted. The interview guide developed for this study (Appendix C) was general enough that it was suitable for use in interviews conducted with participants from all three contexts -- education, practice, and professional organizations – and was suitable for use in the focus group session as well.

The second mechanism for ensuring that salient topics were covered was that interview participants were sent the interview questions prior to the interview itself. The list of questions alerted participants to the ideas that the researcher intended to cover. Further details about how the interviews took place are provided Section 3.4.1 (pp. 84-87).

*“In the interview guide approach, topics are selected in advance but the researcher decides the sequence and wording of the questions during the interview” (McMillan & Schumacher, 1989, p. 405).*

*“Anchored in real-life situations, the case study results in a rich and holistic account of a phenomenon” (Merriam, 2001, p. 41).*

Unstructured interviews are described by Merriam (2001) and Patton (1990) as informal and conversation-like. Although data from these kinds of interviews can be difficult to analyze because different information is collected from different participants, in case study research unstructured interviews are the most appropriate way for researchers to gather data without being overly obtrusive. With good interpersonal skills, a researcher may conduct informal interviews with people and “the person being talked with may not even realize they are being interviewed” (Patton, p. 280).

### 3.2.2 Case Study Method

In qualitative research, the case study is described as “an in-depth investigation of a single instance. . . . It represents a *holistic* approach to research, and rests on the assumption that understanding is increased by considering the entire entity rather than breaking it into its constituent parts” (Sommer & Sommer, 2002, p. 203). In education, Robert Stake (2000) describes case studies as the study of “a specific, unique, bounded system,” and as “both a process of inquiry about the case and the product of that inquiry” (p. 436).

According to Patton (1990) and Stake (2000), the primary advantages of case study research are:

- (a) the “Direct, personal contact with and observations of” particular settings which provide researchers with the opportunity to understand, holistically and inductively, the context of the particular setting (Patton, p. 203);
- (b) the ability for the researcher to detect subtle indications, casual comments, and seemingly unimportant, everyday behaviours or events which can provide important clues about the phenomenon under study; and
- (c) assessment

of the physical environment -- a static, often taken-for-granted factor that can provide many clues about the nature of research in interior design practice and education. Given these advantages, case study research was an appropriate method for this study where the primary purpose was to discover detailed information about the nature and purpose of research in a specific interior design context.

A potential weaknesses in case study research occurs when participants know they are being observed. "Observer effects" can result when people act differently than they would normally (Gillham, 2000; Taylor & Bogdan, 1998). Usually, extended time in the setting will enable participants to become accustomed to the researcher's presence and to resume normal activities and behaviours. In this study, the case study took place over a five day period. Although a longer period of time may have minimized observer effects, a longer observation period was impossible due to time restrictions of both the researcher and the case study participants. At any rate, the participants in this study seemed quite at ease during the case study probably because, according to them, they regularly have groups of individuals touring their facility and interacting with them.

To minimize observer effects, the researcher in this study assumed the position of "observer as participant," a role which would not exist normally but which was created for the purposes of the study (McMillan & Schumacher, 1989; Merriam, 2001). Typically, when researchers assume the role of observer as participant, individuals within the setting under study are aware of the researcher's observation activities, and allow the researcher to participate in normal everyday activities, such as meetings and informal social interactions. Participant observers, however, make every effort not to impinge on normal activities, and resist

*“... case study research usually involves all three strategies of interviewing, observing, and analyzing documents. On-site investigation of the case involves observing what is going on, talking informally and formally with people, and examining documents and materials that are part of the context” (Merriam, 2001, p. 137).*

any invitations to participate in existing or established roles. Simply put, the observer as participant openly collects data within a setting and participates in as many activities as possible without being intrusive.

### **3.2.2.1 Case Study Data Collection Techniques**

In this study, a combination of field notes, audio and video recording, and digital and Polaroid photography were used to record observations, unstructured interviews, a focus group session, the physical environment, and participants. Documents were also obtained while on site. This combination of data types and data collection techniques resulted in rich information about the firm’s historical background, physical setting, and everyday events, activities, and routines (Stake, 2000).

#### **3.2.2.1.1 Observation**

An observation guide organized around “sensitizing concepts” was used in this study to provide a basic framework for observing: (a) the physical setting; (b) participants’ behaviours, activities, interactions, and conversations; and c) the researcher’s own behaviour or reaction to observed conditions (Merriam, 2001; Patton, 1990) (Appendix E). Such guides are particularly useful and appropriate when a researcher has only a limited time in the field. In this study, case study research occurred over a five day period. Although not a particularly long time, there is no strong evidence that longer stays yield better data (Stake, 2000). During this time, the researcher used the observation guide to document everyday occurrences within the setting, and to optimize the richness of the data collected.

#### **3.2.2.1.2 Unstructured Interviews**

In this study, unstructured, informal interviews took place whenever appropriate occasions arose. For instance, conversation-like interviews took place in corridors or

meeting rooms before or after meetings, and during coffee and lunch breaks. The main purpose of these interviews was to engage participants in casual conversations about research-related activities and the general situation within the setting (e.g., how people worked, what their role in the firm was).

### **3.2.2.1.3 Documents**

The primary benefits of using written documents as a source of data are that they: (a) can be obtained unobtrusively, (b) are usually accessible and free, (c) are non-reactive (not affected by the research process), (d) can be used to cross-check data obtained through interviews and/or observation, (e) can contain information not available through other means, and (f) are grounded within the context from which they came and are, therefore, reflective of the day-to-day issues in that context (Merriam, 2001).

In this study, a variety of written documents (e.g., white papers, programme documents, internal documentation, etc.) were collected during the case study. Documents were used to supplement data collected through observation and unstructured interviews. It should also be noted that documents were collected from individuals who participated in the semi-structured telephone interviews.

### **3.2.2.1.4 Field Notes**

Typically, observations and unstructured interviews are recorded by researchers using field notes. Taylor and Bogdan (1998) wrote that:

. . . field notes should include descriptions of people, events, and conversations as well as the observer's actions, feelings, and hunches or working hypotheses. The sequence and duration of events and conversations are noted as precisely as possible. The fabric of the setting is described in detail. In



short, the field notes represent an attempt to record on paper everything that can possibly be recalled about the observation. (p. 67)

Taylor and Bogdan also advocate unobtrusive note-taking suggesting that field notes should be recorded “as soon as possible after observing” (p. 69).

In this study, field notes were made both unobtrusively and obtrusively.<sup>2</sup> The sensitizing concepts discussed earlier provided a framework for recording field notes, while the observation guide provided a consistent means of recording the time, contexts, individuals, behaviours, and observer comments (Appendix E) related to observations made.

#### **3.2.2.1.5 Focus Groups**

Bogdan and Biklen (2003) describe a focus group as a group interview that is structured to encourage participants to talk about particular issues. According to Bogdan and Biklen, focus groups range in size from 7-10 people, and are guided by a facilitator. The primary benefits of focus groups are that they are useful for obtaining a range of views or opinions on a topic, and “Group participants can stimulate each other to articulate their views or even to realize what their own views are” (Bogdan and Biklen, p. 101). The inherent weaknesses of focus groups are that: (a) some participants may dominate the discussion thereby not allowing all participants to state their opinion, (b) some participants may be too embarrassed to express their views in an open forum, and (c) discussion can easily veer off topic. A skilled facilitator, however, can usually manage to overcome these potential problems. In this study, a focus group was conducted with 11 individuals who worked in the firm that was the focus of the case study.

### **3.2.2.1.6 Audio Recording**

In addition to field notes, Taylor and Bogdan (1998) suggest that a cassette recorder can be used to document observations made in the field. They claim that recording “People’s gestures, nonverbal communication, tone of voice, and speed of speaking help the observer to interpret the meaning of their words” (Taylor & Bogdan, p. 77). Audio recording is also “indispensable” for documenting long conversations, meetings, or other lengthy dialogues (Patton, 1990, p. 348). The benefits of audio recording are that it reduces the amount of field notes that need to be taken, and reduces the possibility of the researcher forgetting important details.

Although, in this study, it was not possible to record every conversation using audio tape, a small micro-cassette recorder was used whenever possible. The tape recorder was also used to record the focus group session, and to record telephone interviews.

### **3.2.2.1.7 Videotape Recording, and Digital and Polaroid Photography**

According to Eisner (as cited in Lincoln & Guba, 1985), videotape recording can provide the means for capturing episodes in the field that can be examined later and “compared to the critiques that had been developed from all of the data collected. The recorded materials provide a kind of benchmark against which later data analyses and interpretations (the critiques) could be tested for adequacy” (p. 313). In this study, videotape recording, as well as digital and Polaroid photography, were used to document the physical environment, document case study participants, confirm data obtained through other means, verify emerging themes, and establish credibility. All visual recordings were used as reference only, and were not

*“By using a combination of observations, interviewing, and document analysis, the fieldworker is able to use different data sources to validate and cross-check findings. Each type and source of data has strengths and weaknesses. Using a combination of data types increases validity as the strengths of one approach can compensate for the weaknesses of another approach” (Patton, 1990, p. 244).*

transcribed or analyzed directly.

Overall, there were at least two important benefits of the research design used in this study. Firstly, data were obtained from individual participants in diverse roles, and from the researcher’s own observations of research-related activities within a professional practice setting. Secondly, triangulation of methods and data increased the credibility of the study.

### **3.3 STUDY PARTICIPANTS**

In the two-part research design, telephone interviews were conducted first, followed by case study research within a professional practice setting. The rationale for this design was that interviews with individuals in different contexts would help determine which setting might provide the best opportunity for case study research. The process for selecting study participants, however, began by selecting potential case study settings, and then selecting potential interview participants within each setting.

#### **3.3.1 Potential Participants**

A database of potential case study settings (and thus telephone interview participants) was created based on information available from a variety of sources including: (a) various publications,<sup>3</sup> (b) a list of accredited interior design programs in North America (FIDER, 2002), (c) information available on the Internet, (d) consultation with the researcher’s advisory committee, and (e) the researcher’s personal knowledge and awareness gained through 20 years experience in interior design education and practice. The database included participants from educational institutions, practice firms, and professional

organizations.<sup>4</sup> This method of selecting potential case study settings and interview participants constitutes purposive and convenience sampling. These sampling techniques were appropriate because they enabled the researcher to identify specific participants who would be likely to provide the greatest opportunity to learn about the topic under investigation (Merriam, 2001; Patton, 1990; Stake, 2000).

Potential case study settings were also identified based on two other criteria. Firstly, since one of the objectives of the study was to discuss implications of the findings for post-secondary interior design education in Canada and the United States, representation from both countries was sought. Without data from both countries, some readers could consider the results of the study to be biased or non-representative. Further, within each country, representation was sought from west to east and north to south.

Secondly, in order to obtain multiple perspectives and breadth of data, case study settings were sought from a range of program and practice types. For example, educational settings were selected so that the sample set contained a complete range of educational programs from undergraduate to Ph.D., and contained programs from a range of colleges or faculties including architecture, art and design, and human ecology. Practice settings were selected so that the sample set represented a range of services (e.g., interior design, architecture, and planning), a range of project types (e.g., workplace, retail, hospitality, and healthcare), and a range of firm sizes (i.e., small, medium, large<sup>5</sup>). Professional organization settings were selected on the basis of reasoned judgment about which organizations were the most active in, or committed to, research activities.

Based on these criteria, three preliminary databases were created, each containing 6-15 potential settings.

### **3.3.2 Selected Participants**

Once the preliminary database was established, an in-depth assessment of each potential setting was made by reviewing its Website and discussing the settings with my advisory committee. In many cases, the Websites included employee names, and some included curriculum vitae as well. This information enabled potential participants to be identified quite easily.

The individuals recruited for participation in the study were those deemed to be in the best position to answer questions about research-related activities within the organizational setting with which they were employed or affiliated. In most cases, the individuals chosen were employed or affiliated with the setting long enough to understand the scope of research-related activities within it. Typical interview participants included department heads or chairs of educational programs; partners, senior designers, or individuals with at least five years experience within a professional design firm; and individuals who served on boards within professional organizations.

The final participants chosen for the study were selected by calling each institution, practice firm, or organization and asking for a specific person (who had been identified beforehand from information available on the affiliation's Website). In cases where a potential participant was not identified prior to the initial call, numerous phone calls were made in order to find a participant who was qualified, willing, and able to participate in the study.

Once the telephone interviews were complete, a setting was selected for case study research. Although

most of the institutions, practice firms, and professional organizations presented exciting possibilities for case study research, the setting ultimately chosen was that of a professional practice firm in the United States. Two factors influenced this decision.

First, since I work within an educational setting, I did not believe that doing a case study of another educational setting would provide me with the greatest opportunity to learn about the nature of research in other interior design contexts. Second, since most professional organizations do not conduct research on a regular basis, they were ruled out as an appropriate choice.

Ultimately, it was decided that a practice firm would provide me with the greatest opportunity to learn about research from a perspective that I was least familiar with. Understanding more about the nature and role of research within professional practice would balance my existing knowledge of research within educational settings. Choosing a practice firm from the United States also enabled me to gain insight into a cultural context with which I was less familiar.

The particular firm selected was chosen because conversations with the principals of that firm caused me to believe that it would provide the best opportunity to learn about research in relation to design. Additionally, since the firm had about 50 employees, I believed that it would be a manageable site at which to conduct the case study.

The final databases of interview participants are shown in Tables 1 (p. 80), 2 (p. 81), and 3 (p. 81). Table 4 (p. 82) describes participants from the case study setting. To protect the identities of participants, each individual was randomly assigned an alphanumeric designation. EIP refers to an Educational Institution Participant, PPP refers

to a Professional Practice Participant, POP refers to a Professional Organization Participant, and CSP refers to a Case Study Participant. These descriptions are used in Chapters Four, Five, and Six to designate citations from each participant. All of the individuals in Tables 1-4 indicated their willingness to participate in the study by completing and returning consent forms to the researcher.

**Table 1 – Participants From Educational Institutions**

<b>Participants 11</b>	<b>Participant Profile</b>	<b>Country</b>	<b>Degrees Offered at Institution</b>
<b>EIP 1</b>	Ph.D.; Head	Canada	Bachelor of Applied Arts (first-professional)
<b>EIP 2</b>	Professor Emeriti	United States	B.S.; M.S. (post-professional); Ph.D.
<b>EIP 3</b>	Director; Associate Professor	United States	B.I.A. (Interior Architecture); M.I.A. (first-professional)
<b>EIP 4</b>	Ph.D.; Professor	United States	B.A.; M.A., M.S. (Post-professional)
<b>EIP 5</b>	Associate Professor	United States	B.S.; M.S. (post-professional); M.A. (post-professional); Ph.D.
<b>EIP 6</b>	Ph.D.; Chair	United States	B.F.A.; M.S. (first- & post-professional)
<b>EIP 7</b>	Ph.D.; Assistant Professor	United States	Bachelor of Design; M.I.D. (first- & post-professional); Ph.D.
<b>EIP 8</b>	Ph.D.; Assistant Professor	United States	B.S.; M.S.D. (first- & post-professional); Ph.D.
<b>EIP 9</b>	Professor	United States	B.S.; M.S. (post-professional); M.F.A; Ph.D.
<b>EIP 10</b>	Ph.D.; Professor	United States	B.S.
<b>EIP 11</b>	Ph.D.	United States	B.S.; M.S.

**Table 2 – Participants From Professional Practice Firms**

<b>Participants 14</b>	<b>Participant Profile</b>	<b>Country</b>	<b>Services Offered</b>
<b>PPP 1</b>	Principal	Canada	Multi-disciplinary
<b>PPP 2</b>	Senior Vice President	United States	Design & Business Consulting
<b>PPP 3</b>	President	Canada	Interior Design
<b>PPP 4</b>	Vice President	United States	Multi-disciplinary
<b>PPP 5</b>	Principal	United States	Interior Design
<b>PPP 6</b>	Vice President	United States	Multi-disciplinary
<b>PPP 7</b>	Senior Designer	Canada	Multi-disciplinary
<b>PPP 8</b>	Vice President	United States	Multi-disciplinary
<b>PPP 9</b>	Principal	Canada	Interior Design
<b>PPP 10</b>	Principal; Director of Interior Design	Canada	Multi-disciplinary
<b>PPP 11</b>	Principal	United States	Interior Design
<b>PPP 12</b>	Strategic Planner	United States	Multi-disciplinary
<b>PPP 13</b>	Principal	Canada	Multi-disciplinary
<b>PPP 14</b>	Managing Principal	US	Interior Design

**Table 3 – Participants From Professional Organizations**

<b>Participants 5</b>	<b>Participant Profile</b>	<b>Country</b>	<b>Services Offered<sup>a</sup></b>
<b>POP 1</b>	Ph.D.; Senior Council Member	United States	
<b>POP 2</b>	Senior Administrator	United States	
<b>POP 3</b>	Ph.D.; Senior Administrator	United States	
<b>POP 4</b>	Senior Administrator	United States	
<b>POP 5</b>	Ph.D.; Senior Council Member	United States	

<sup>a</sup>To protect the anonymity of participants, the type of organization has been withheld.



**Table 4 – Participants From the Professional  
Practice Case Study**

<b>Participants 14</b>	<b>Participant Profile</b>	<b>Country</b>	<b>Services Offered</b>
<b>CSP 1</b>	Director of Research & Development; Associate	United States	Interior Design
<b>CSP 2</b>	Senior Project Manager; Senior	United States	Interior Design
<b>CSP 3</b>	Resource Specialist	United States	Interior Design
<b>CSP 4</b>	Project Manager; Senior	United States	Interior Design
<b>CSP 5</b>	Senior Project Manager; Senior	United States	Interior Design
<b>CSP 6</b>	Design Manager; Intermediate	United States	Interior Design
<b>CSP 7</b>	Project Designer; Junior	United States	Interior Design
<b>CSP 8</b>	Design Manager (Technical); Intermediate	United States	Interior Design
<b>CSP 9</b>	Facility Programmer; Senior	United States	Interior Design
<b>CSP 10</b>	Senior Project Manager (Technical)	United States	Interior Design
<b>CSP 11</b>	Project Designer; Junior	United States	Interior Design
<b>CSP 12</b>	Senior Design Manager; Senior	United States	Interior Design
<b>CSP 13</b>	Senior Technical; Manager	United States	Interior Design
<b>CSP 14</b>	Design Manager; Intermediate	United States	Interior Design

Originally, the plan was to have 10 participants from educational institutions, 10 from practice firms, and 5 from professional organizations. Through the data collection process, however, several additional interviews were conducted because of various opportunities that arose. For instance, while conducting one interview, the participant mentioned the name of a person who she thought would have important information for my study. Consequently, I contacted that individual and she agreed to participate in the study.

In another case, two participants from one firm were interviewed because the first participant thought that I would get better data from a co-worker. Not wanting to insult the original participant, I completed the interview with him, and then proceeded to conduct a separate interview with his co-worker. In a similar case, the person I was interviewing suggested that I also interview a co-worker who worked in a different division of the same company.

Other circumstances arose, as well, which also affected the final number of participants in the study. In one case, when I called a participant to conduct an interview, he had taken it upon himself to ask a co-worker to participate in the interview. Consequently, that interview involved two participants. In another case, a participant completed the interview but failed to return a signed consent form. After several attempts to contact this individual, it was determined that he had left the firm and could not be contacted. Consequently, the data from that interview was excluded from the study.

In total, 29 telephone interviews were conducted with participants from 28 different settings. Eleven participants represented 11 educational institutions (1 from Canada, 10 from the United States), 14 participants

represented 12 practice firms (6 from Canada, 8 from the United States), and five participants represented five professional organizations (all from the United States). Although the intent was to balance the participants as equally as possible between Canadian and American representation, there was only one Canadian educational institution that was appropriate for the study,<sup>6</sup> and no professional organizations within Canada that were thought to be suitable for participation. Overall, there were seven Canadian participants and 22 American.

### **3.4 DATA COLLECTION PROCEDURES**

Data was collected first from individual interviews and then from field observations in a professional practice setting. Following are brief descriptions of the procedures used for data collection.

#### **3.4.1 Data Collection Procedures for Semi-Structured Interviews**

1. Potential participants were contacted by telephone to determine whether or not they were willing to participate (Appendix A). Individuals not willing, or unable, to participate were asked to provide names of other individuals within the institute, firm, or organization who might be willing to participate.

2. Individuals willing to participate in the study were sent a package containing a cover letter, a list of the interview questions, a document request list, a profile questionnaire, a preferred interview time form, a study results request form, and two consent forms (Appendix B). Participants were asked to return one signed consent form, the completed profile questionnaire, sample documents,

and the study results request form to the researcher prior to the interview date. They were also asked to indicate a suitable time and date for the telephone interview, as well as an alternative time and date. For several reasons (i.e., unreliable postage system, participants' busy schedules), it became easier to call each participant, directly, to establish the interview time rather than to have them complete the Preferred Interview Time form.

Participants were asked to complete a profile questionnaire so that the researcher would have accurate and consistent demographic information about each participant, and so that valuable interview time would be preserved. Intended to take no more than 10 minutes to complete, most participants completed the survey and returned it in the pre-addressed envelope provided (Dillman, 2000). There were several individuals who, rather than complete the profile questionnaire, simply sent their resumes.

3. Using the interview guide described earlier (Section 3.2.1, pp. 68-70), interviews were conducted by telephone<sup>7</sup> between October 24, 2003 and January 14, 2004. On average, each interview lasted 50 minutes. Follow-up interviews were not required since all participants were willing to continue the initial interview until all of the questions on the interview guide had been discussed. All interviews were recorded with a micro-cassette recorder connected directly to the telephone line.

As illustrated in Table 5 (p. 86), the interview guide consisted of 10 questions as well as numerous probes. While the interview guide was followed fairly closely for about the first 15 interviews, gradually, it became apparent that Question Four seemed redundant because participants addressed Question Four in their responses to Question

**Table 5 – Interview Questions and Focus Group Guide (Repeat of Appendix C)**

<b>Rational</b>	<b>Questions and Probes</b>
Question to determine how people in the program, firm, or organization understand research.	<p>1. Tell me about how interior design faculty and/or students at your institution would <u>define or describe research</u>.</p> <p><u>Probe</u>: In general, what do most interior design faculty and/or students at your institution think research is? Is there any interior design faculty member who has a view of research that is different from most interior design faculty who work at your institution? Do you think that I could have the name of that person? _____</p>
Questions to determine the purpose, types, and sources of research used in interior design.	<p>2. <u>When</u>, and <u>for what purpose</u> do interior design faculty and/or students at your institution use research? Please provide an example.</p> <p><u>Probe</u>: During the beginning phases of a design project, throughout complex or unusual projects, to understand unusual or unknown aspects of a project (i.e., healthcare issues, workplace issues, human behaviour issues), to understand building code issues, etc.. Are there times when interior design faculty and/or students use different types or amounts of research? Explain.</p> <p>3. What <u>kinds</u> of research do interior design faculty and/or students at your institution use, and <u>how</u> do they use it? Please provide an example.</p> <p><u>Probe</u>: Literature from related industries; libraries; research reports from governments, organizations, universities, or academic journals; magazines; conferences or trade shows; by reading and synthesizing information; by citing information in reports and programme documents; by pointing out information to clients.</p> <p>4. Who or what company, organization, institution, or publication <u>produces, conducts, or publishes</u> the research or knowledge that interior design faculty and/or students at your institution use most frequently?</p>
Questions to determine research needs and sources of needed research.	<p>5. What kinds of research do interior design faculty and/or students at your institution <u>need</u>, but currently <u>do not</u> have access to?</p> <p><u>Probe</u>: Research on certain topics such as human behaviour, sustainable design, the value of design, post-occupancy evaluations; applied research (research that is easy to apply directly to design i.e., design guidelines, principles); theoretical research, etc..</p> <p>6. Who or what company, organization, institution, or publication do interior design faculty and/or students at your institution think <u>should produce, conduct, and/or publish</u> the research needed?</p> <p><u>Probe</u>: Related industries, universities, researchers in environmental psychology, social scientists, professional interior design organizations, etc..</p> <p>7. How should research be made <u>accessible</u> to interior design faculty and/or students at your institution (i.e., literature, Internet, product representatives, seminars, conferences, trade shows, continuing education, etc.)?</p>
Questions to determine research undertaken, conducted or produced in education, practice, and professional organizations.	<p>8. Can you give me an <u>example of research conducted</u> by interior design faculty and/or students at your institution?</p> <p>A. Were other people were involved in the research, and if so were they architects, or experts from other disciplines?</p> <p>B. Was the research conducted a typical or normal part of what goes on at your institution or was it an unusual situation?</p> <p>C. What did your institution or researcher do with the research results?</p> <p><u>Probe</u>: Used results to complete a specific design project, convince clients, publish article/s, graduate, promotion, etc..</p> <p>9. What <u>facilities and/or resources</u> does your institution have to support interior design faculty and/or students in conducting their research, and are these facilities and/or resources <u>adequate</u>? Explain.</p> <p><u>Probe</u>: Literature libraries, product libraries, experimental laboratories, assembly areas, quiet work areas, computer and other technologies, etc..</p>
Concluding question and opportunity to add additional information.	<p>10. Besides the topics that we've discussed already, is there anything else that you think I should know about interior design <u>research-related activities</u> at your institution?</p>

Three. Thus, Question Four was eventually eliminated from the remaining interviews. In addition, minor changes were made in terms of the order that questions were asked.

In addition to the pre-planned questions, other questions were sometimes asked as well. These ad hoc questions were asked because of certain issues that participants raised, or certain comments that they made during the interview. The additional questions were not consistent among all interviews, but the data they yielded was considered to be valuable in this qualitative study, and were thus included in the analysis.

### **3.4.2 Data Collection Procedures for the Case Study**

1. The interview participant from the selected case study site was contacted by telephone to ascertain whether case study research was possible at his firm. Although no specific protocol was developed for contacting this individual, the Cover Letter/Employee Consent Form in Appendix D was used as a guide.

2. After agreeing to participate, the participant was sent a package of materials about the study. The package included a cover letter/employee consent form, a list of pre-visit information requirements, an itinerary, a copy of the guide that would be used during the focus group session, and consent forms that participants would be asked to complete (Appendix D).

3. Originally, the intent was for the interview participant to identify a designated contact person. In this particular case, however, the interview participant acted as the contact person. During our initial conversation, we determined a suitable time frame for the study.

4. The case study was conducted between January 26<sup>th</sup> and 30<sup>th</sup>, 2004. While on site, data were collected using

*Qualitative data analysis “is a systematic process of selecting, categorizing, comparing, synthesizing, and interpreting to provide explanations of the single phenomenon of interest. . . . Qualitative data analysis varies widely because the different research foci, purposes, and data collection strategies” (McMillan & Schumacher, 1989, p. 414).*

the techniques described earlier in this chapter in Section 3.2.2.1 (pp. 72-76). Using the guide shown in Appendix E, observations were made of: (a) the physical setting, (b) participants behaviours, activities, interactions, and conversations, and (c) the researcher’s own behaviours or reactions to observed conditions.

In addition, unstructured interviews were conducted with eight individuals in the setting. Since these interviews were intended to be natural and “conversation-like,” no interview guide was used for them. Finally, a focus group session was conducted on the last day of the visit. The session took place during the lunch hour and was attended by 11 participants.

During the five day period, the majority of data were recorded through written field notes. These notes were supplemented, whenever possible, with audio and video recording, as well as digital and Polaroid photography.<sup>8</sup>

### 3.5 DATA ANALYSIS PROCEDURES

In this study, data collection and analysis took place simultaneously. Ongoing data analysis occurred through the creation of theoretical memos (diary-like entries of emerging themes, interpretations of data, and general thoughts about the study) which proved to be even more important than initially thought. In addition to contributing to an audit trail, which is important for establishing credibility, the memos were eventually used to help formulate the Synoptic of Themes discussed in the next chapter.

Although data analysis was an ongoing process, essentially, it consisted of nine basic “steps.” It is noteworthy that even though the nine-step process provides an overview of how the data were analyzed, Chapters Four

and Five actually provide more insight into how specific decisions were made during the data analysis and synthesis process. The data analysis process included the following procedures:

1. An electronic database was established.

Tape recorded interviews and the focus group session were be transcribed, verbatim, as soon as possible after the data were collected. Field notes were also entered into the electronic database as were abstracts of documents collected from interview and case study participants. In some cases, portions of the documents collected were scanned using OmniPage Pro optical character recognition (OCR) software, a text-recognition software program developed by ScanSoft, Inc. (2003).

The transcribed information was entered into Microsoft Word, and then transferred to NUD\*IST 4.0, a qualitative data analysis software program (Qualitative Solutions and Research Pty Ltd., 1997). The NUD\*IST data sets included: (a) 29 transcripts from the telephone interviews, (b) three sets of document abstracts from participants in educational, professional practice, and professional organization settings, (c) eight unstructured interviews completed during the case study, (d) a transcript from the focus group conducted during the case study, (e) a set of document abstracts from the case study, and (f) five sets of field notes (one for each day) from the case study. In total, there were 46 different data sets entered into NUD\*IST.

Although LeCompte and Schensul (1999) warn that “computers alone do not analyze or even code data,” and that, “The process of coding, retrieving, and subsequently mulling over and making sense of data remains a laborious process *completely controlled* by researchers” (p. 92), the QSR software program has been considered by others



(Amankwaa, 2002), and was considered in this study, to be extremely useful for analyzing large amounts of qualitative data.

2. Code categories were identified and data were coded.

According to LeCompte and Schensul (1999):  
Codes are names or symbols used to stand for a group of similar items, ideas, or phenomena that the researcher has noticed in his or her data set. In order to determine the relative frequency of occurrence of items or other phenomena, researchers have to code the data. (p. 55)

Codes are used to reduce data rather than to expand it. Typically, codes are arranged in some hierarchical fashion, and often include subcodes and sub-subcodes.

The most practical way to begin coding the data in this study was to use the interview guide as the basis for establishing initial code categories. Thus, all 29 transcripts from the telephone interviews were coded using the categories from the interview guide. Throughout the process of coding, additional code categories were created in order to accommodate themes that did not fit within the initial code categories. As data from documents and the case study were coded, the number of additional code categories increased.

3. Code categories were collapsed and data were re-coded.

Generally, the coding process can be described as one in which coded data are compared constantly with previously coded data. This technique, known as “constant comparison,” is most commonly associated with grounded theory research (Glaser & Strauss, 1967).

Glaser and Strauss (1967) describe two basic rules for constant comparison. First, “*while coding an incident for a category, compare it with the previous incidents in the same and different groups coded in the same category*” (Glaser & Strauss, p. 106). Second:

After coding for a category perhaps three or four times, the analyst will find conflicts in his [sic] thinking. He [sic] will be musing over theoretical notions and, at the same time, trying to concentrate on his [sic] study of the next incident, to determine the alternate ways by which it should be coded and compared. At this point, the second rule of the constant comparison method is: *stop coding and record a memo on your ideas.* (Glaser & Strauss, p. 107)

Throughout the coding process, Glaser and Strauss (1967) recommend that researchers document both theoretical and process memos. Theoretical memos are similar to “working hypotheses,” and are simply thoughts and observations made by the researcher throughout the data analysis process. Process memos describe decisions made by the researcher throughout the data analysis process (e.g., the rationale for deciding to collapse or combine two code categories could be recorded as a process memo). Theoretical and process memos help to ensure that the process of data analysis is documented and that the rationale for decisions made throughout the data analysis process is recorded. As discussed earlier, these memos can also serve as an audit trail, providing evidence and confirmability of both the study process and products.

In this study, data were re-coded and categories collapsed several times until it was believed that all of the data were coded into the proper category and that categories

*“The core stage in the process of generating theory, the bedrock of theory generation, its true product is the writing of theoretical memos. . . . Memos are the theorizing write-up of ideas about codes and their relationships as they strike the analyst while coding. Memos lead, naturally to abstraction or ideation. Memoing is a constant process that begins when first coding data, and continues through reading memos or literature, sorting and writing papers or monographs to the very end” (Glaser, 1978, p. 83).*

could be collapsed no further.

4. Literature related to general themes was reviewed.

The purpose of this phase was to establish theoretical triangulation (Section 3.1.1.1, pp. 64-65) which, incidentally, did not occur in the way that I thought it would. Initially, I thought that a theory from literature outside of interior design (e.g., education, social sciences, physical sciences) would help “make sense of the data.” Although I searched literature outside of interior design attempting to find a theory that would synthesize all of the themes, such a theory was elusive. Instead, I worked on the Literature Review (Chapter Two), and in doing so, discovered several themes that related to the themes uncovered in the data. These combined themes eventually led to literature outside of interior design, but not before one more important step took place.

5. A Synoptic of Themes was generated.

The Synoptic of Themes was created by amalgamating information from three sources: (a) literature, (b) the data, and (c) my own theoretical memos. Although this step was never part of the original plan for how the data would be analyzed, it became clear that such an amalgamation was crucial because it resulted in the identification of significant themes across multiple sources of information. With further analysis and synthesis, the Theoretical Framework for Research in Interior Design emerged with surprising clarity.

6. Conclusive statements were made and a rationale was formulated.

Based on the Synoptic of Themes, a series of conclusive statements were made about what seemed to be the most significant ideas in the study. These statements

were a way of synthesizing everything that the study findings represented. In writing these statements, it became clear that they also served as the rationale for the emerging Theoretical Framework.

#### 7. Goals were established for the Theoretical Framework

Once the conclusive statements were formulated, goals for the Framework were established. Although I knew what the Theoretical Framework ought to include, the goals helped clarify specific objectives and specific content for the Framework.

#### 8. The Theoretical Framework for Research in Interior Design was developed.

Although described as the eighth “step” in the data analysis process, the Theoretical Framework for Research in Interior Design actually emerged much earlier in the process. Indeed, it began to take shape just after the Synoptic of Themes was identified. Nonetheless, the Framework continued to evolve based on the rationale and goals identified previously, and based on constant comparison with the Synoptic of Themes. Eventually, what resulted was a Theoretical Framework for Research in Interior Design that was consistent with the theoretical frameworks described in Section 2.3.1 (pp. 56-59).

#### 9. Reconstructed interpretations of data were verified by participants.

The final phase of the data analysis process involved verification of participants’ comments through “member checks.” Lincoln and Guba (1985) describe member checks as a process by which “data, analytic categories, interpretations, and conclusions are tested with members of those stakeholding groups from whom the data were originally collected” (p. 314). According to Lincoln and

Guba, member checks are the most crucial of the techniques for establishing credibility in qualitative research. In this study, all consenting participants had the opportunity to verify statements made by or about them or their institution, practice firm, or organization.

The confirmation process took place by sending all participants pertinent portions of the final document, as it appeared in its final format, to review, comment on, and revise. Negotiations took place between the researcher and each participant until both were satisfied that statements made in the document accurately reflected the participant's original comments and intentions.

### **3.6 ETHICAL ISSUES**

Several measures were taken to ensure that the study met ethical and professional research standards. These included the following:

1. Interview participants and case study contacts received a letter explaining the purpose of the study. The letter provided contact numbers for my Ph.D. Advisor so that participants could verify the study's authenticity (Appendixes B and D).

2. Interview and case study participants signed a consent form which described what they could expect in terms of confidentiality and anonymity, as well as other important issues (Appendixes B and D).

3. All consenting participants had the opportunity to verify statements made by or about them, their institution, firm, or organization. Participants received pertinent portions of the final document, as it was to appear in its final format, to review, comment on, and revise if necessary. When necessary, negotiation took place between the

researcher and the participant/s until a fair and ethical compromise was agreed upon (Appendix F).

4. Interview participants received a summary of the study results once the dissertation was approved by the researcher's Ph.D. Advisory Committee, the Faculty of Education, and the Faculty of Graduate Studies at the University of Manitoba.

5. The contact person for the case study received a bound copy of the complete dissertation, again, once the dissertation was approved by the researcher's Ph.D. Advisory Committee, the Faculty of Education, and the Faculty of Graduate Studies at the University of Manitoba.

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## Notes

1. The theory of social constructivism centers on the notion that skills, knowledge, and meaning are created or constructed through social interaction and experience (Schunk, 2000). Two forms of social constructivism exist: classic and radical. Classic social constructivism is that in which "knowledge is created and determined viable through functional and pragmatic social interaction," and "consensus between different subjects" is the ultimate criterion for judging knowledge (Powers, 2001, Social Constructivism). Radical social constructivism "holds that knowledge is subjectively created through personal experiences within the context of the individual" (Powers, Social Constructivism, para. 1). In other words, in radical constructivism, meaning-making occurs through the individual and in classic constructivism, meaning making occurs through a social context (Gredler, 2001).
2. Occasionally, it was necessary to make notes, obtrusively, during discussions with participants. Other times notes were made, unobtrusively, directly after periods of observation or informal interviews.
3. In order to protect the anonymity of participants, the publications cannot be named.
4. Related industries were excluded from the database since identifying and accessing related industries would have required more resources than were available. More importantly, however, since research used, created, and/or needed in related industries

is important but not exclusive to interior design, including related industries was considered to be too far removed from the central purpose of the study.

5. Using the criteria from IIDAF's (1999) study, small firms were considered to be those that had fewer than 10 employees, medium firms were those that had 10-20 employees, and large firms were those that had 100 or more employees.
6. Although the institution at which I am employed would have provided additional Canadian representation, in order to avoid bias, the institution was not included in the study.
7. Although semi-structured interviews are ideally conducted face-to-face with participants (so that the interviewer can observe body language, contextual situations, and other factors), there are times when face-to-face encounters are not possible (Fontana & Frey, 2000; Taylor & Bogdan, 1998). In this study, semi-structured interviews were conducted by telephone so that resources could be preserved for the time-intensive and financially-demanding case study.
8. Polaroid photographs were taken of each participant and attached to their consent forms. This enabled easy recall of participants during the data analysis phase.

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## Chapter Four

### Findings



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Described in this chapter are two sets of findings. The first set describes participants' perceptions about research in three interior design contexts: (a) education, (b) practice, and (c) professional organizations. This set of findings is based on data from the telephone interviews, documents collected from participants, and the case study, including informal interviews, documents, field notes, and a focus group. The second set of findings is an amalgamation of themes found in the literature, data, and theoretical memos generated throughout the data collection and analysis process. This second set of findings serves not only as a summary of themes, but also as a starting point for the development of the Theoretical Framework for Research in Interior Design explained in the next chapter.

#### **4.1 PARTICIPANTS' PERCEPTIONS ABOUT RESEARCH**

This set of findings supports one of the primary purposes of the study, which was to establish clear ideas about the purpose, methods, and overall nature of research within three different interior design contexts. The findings described in this section provide information about what and how participants in education, practice, and professional



organizations think about research. These findings confirm some of the ideas explained earlier in the literature review but, at the same time, provide insight into additional issues.

The perceptions described here are based on eight questions from the interview guide including: (a) definitions of research (Question One), (b) examples of research conducted (Question Eight), (c) facilities and resources for supporting research (Question Nine), (d) examples of using research (Question Two), (e) sources of research used (Question Three), (f) research needed (Question Five), (g) sources of research needed (Question Six), and (h) disseminating research (Question Seven). Responses to Question Four are not included here because, throughout the interview process, it became clear that the question was redundant; participants addressed Question Four when they answered Question Three.

Question 10 asked participants if there were any additional issues that they wanted to discuss, such as topics that had not been addressed in the interview. Since the responses to this open question varied widely, the responses were difficult to summarize succinctly. In part, some of the responses reiterated issues that had already been discussed and, in part, some new issues were raised. Consequently, the responses for Question 10 are amalgamated with the additional themes described in the second set of findings later in this chapter.

#### **4.1.1 Perceptions About Research in Education**

##### **4.1.1.1 Definitions of Research (Question One)**

In the education context, perceptions about the definition or meaning of research ranged in extremes from informal to formal. Such extreme perceptions about research exist because of the individuals who function within

the education context: undergraduate students, graduate students, and educators. Although this study focused on ascertaining educators' perceptions about research, educators were also able to provide insight into students' perceptions of research.

According to the educators in the study, undergraduate students believe that research is an informal activity that may be accomplished by looking things up in the library or on the Web, or by gathering information related to specific projects (EIP 4, 10). Many educators implied or suggested that undergraduate students, generally, do not seem to value research. For example, one participant made the following comment:

Our fifth year involves a capstone project where students spend the fall semester researching a topic of their choice. They could research green design or ergonomics in the aging, or whatever. And I'd say that a quarter of the students REALLY get into it. You know, they value it, they can see the application in the design process. Three quarters of them think its a joke. Like, "Why are we doing this?" (EIP 8)

According to the educators in this study, most graduate students and educators think of research in more formal ways. To graduate students and educators, research is that which is "very academic" (EIP 11), "empirical" (EIP 7), or "quantitative, qualitative" (EIP 8). Making reference to tenure and promotion criteria, educators also pointed out, however, that creative scholarship could constitute research as well.

Creative scholarship was described as a design or creative project, or as an "investigation" (EIP 11) related to design. Individuals who undertake creative projects are often educators who have a stronger practice, rather than

*"The undergraduate students think of research as the information gathering and background search part of design studio, I think. You know, any kind of information gathering -- whether it be information gathering for products or precedents is one thing they would point to as research. They would probably talk about gathering site information as research. They would probably talk about if there were a client, you know, gathering kind of client information. To them, programming seems like research" (EIP 11).*

*“Creative scholarship is not at the same level as what you would call -- well it's called research. You know, I mean, it's a big lingo thing. . . . Its made very clear at this institution what is worthwhile and what is not. And I was writing a trade publication for Interiors and Sources, just an article, and -- cause it was interesting and it related to another research article that I was working on -- so I thought, 'Well, I might as well do one for the trade,' because you're kind of supposed to disseminate information. And I was told, 'Well, that's great but you know it doesn't count.' I said, 'What do you mean it doesn't count?' They said, 'Well, it counts, but it doesn't COUNT.' And I'm like, 'Okay, I can read between the lines'” (EIP 8).*

academic background. Students who undertake creative scholarship as a form of research typically produce a practicum, creative project, or design thesis which may include drawings, models, and a written component.

Participants also said that research involves “the posing of a question and the generation of new knowledge to answer the question” (EIP 4), is done to contribute to the body of knowledge (EIP 2, 5), and must be peer-reviewed and disseminated in order to qualify as research. These criteria applied to both research and creative scholarship.

Several participants suggested that educators who do not have an education in scientific research methods do not appreciate empirical research, nor do they understand how to undertake such research (EIP 1, 2, 7, 8). “I have to admit, the ones who are doing creative [projects] don't have an appreciation for research as much as those doing the more empirical research,” said one participant (EIP 2). According to another participant, this lack of understanding often filters down to students. One educator said, “From my experience, I think they [students] define it [research] as looking something up in a book, or going onto the Internet. And, come to think of it, I think we've had some past interior design faculty that use the term that way. And I don't know if they had done any research, if they would be defining it that way or not” (EIP 10).

#### **4.1.1.2 Examples of Research Conducted (Question Eight)**

When asked to provide examples of research conducted by educators at their institution, participants responded by describing specific research studies or topics and/or projects undertaken as creative scholarship. Probing related to this question also resulted in information about research methods used by educators and interdisciplinary research.

Educators undertook research in a broad range of topic areas including: (a) education, (b) healthcare, (c) history, (d) design process, (e) design issues such as materials or lighting, (f) environmental/urban planning, (g) sustainability, (h) “global design from a material culture standpoint” (EIP 9), and (i) architectural or design theory. For educators, creative scholarship projects were related to spatial typologies (e.g., transition spaces, embassy design, retail store design) or included exploratory topics (e.g., creating a table from discarded materials, virtual reality and other technologies). The majority of research examples provided by participants could be described as formal research efforts which were disseminated in the form of peer-reviewed articles, books or book chapters, conference presentations and/or proceedings, non-peer-reviewed publications, and reports.

Participants mentioned action research, empirical studies, qualitative and quantitative studies as well as mixed methods, but did not offer a great deal of detail about the specific methods used. Throughout the interviews, there was some evidence that empirical or quantitative research prevailed as the dominant paradigm since participants frequently used words such as “statistics” or “empirical research” to describe the research that they or their colleagues undertook.

Early on in the interview process, some participants mentioned that interior designers often act as “silos,” implying that interior designers operate independently and rarely communicate with individuals outside of interior design. With that realization, a probe was added to Question Eight. Participants were asked whether or not any of the research undertaken by faculty was of an interdisciplinary nature. In more than a few cases the response was, “Yes.”

Interdisciplinary research was undertaken on a variety of topics with individuals from a wide range of disciplines including architecture, occupational therapy, psychology, gerontology, law, anthropology, theatre and drama, art history. Several participants suggested that collaborative research was encouraged by their university or college, and that doing interdisciplinary research was motivated more by politics than by their own or their colleagues' personal interests (EIP 4, 8). "Interdisciplinary research is being well-received on campus and encouraged. So, we're just trying to play the game," said one participant (EIP 4).

At least two participants pointed out the weaknesses of interdisciplinary research. One said, "And the thing is, which is unfortunate, is that sometimes, to appeal to these other agencies that are outside our immediate discipline, we have to broaden things to the point that maybe the questions gets beyond what you initially wanted to answer" (EIP 4). The other participant said, "Usually when you do interdisciplinary work, it ends up taking more time" (EIP 5).

When asked to provide examples of research done by students, participants described topics undertaken by undergraduate students in their senior "thesis" or "capstone" projects, or particular projects done for studio or other courses. Examples of senior, thesis, or capstone projects included a: (a) subway station, (b) birthing centre, (c) funeral home, (d) sound production studio, (e) Montessori school, (f) co-housing unit, (g) multicultural community centre, (h) restaurant, (i) flower shop, (j) community art centre, (k) mediation and spiritual centre, (l) boutique hotel, (m) youth hostel, (n) spa, (o) holistic healthcare centre, (p) nightclub; (q) workplace environment, (r) design for a product, and

(s) centre for autism (EIP 1, EIP 6). One participant said that these topics were “not any different from other years” (EIP 6).

In both studio and thesis projects, most undergraduate students utilized informal research methods that required “gathering as much information as possible” (EIP 11) on a variety of topics related to whatever project they were working on. Students often relied on magazines or the Internet for information on spatial or typological precedents, products, materials, or issues such as sustainability. Other information-gathering strategies included site or building assessments. Only two participants (EIP 2, 5) mentioned that students did behavioural mapping and used questionnaires, although these methods were utilized in the programming process more as information-gathering techniques rather than as formal research methods.

According to participants, research was undertaken by undergraduate students in order to: (a) establish a concept or to justify the form of a product; (b) incorporate information into a design process; (c) investigate the way an object is assembled; (d) understand something; (e) “find out about a material in terms of functional suitability, relative cost, and sustainability” (EIP 6); or (f) “enhance credibility as an expert problem solver in designed environments” (EIP 5).

Outcomes of these projects or assignments were in the form of a product (e.g., a chair), “a technical manual or a standard programme document” (EIP 11), a PowerPoint presentation, a studio project, or a history paper. Programme documents were the most frequently mentioned outcome of research undertaken by undergraduate students.

*“What I have found working with the students and looking at their definitions -- and I think the definitions they’re getting are from some of us as faculty -- is that there’s some confusion over what, exactly, is research, and what are the components of research. . . . So, for example, at the beginning of many of our studio classes, if they have a particular building type they’re working on, students, in teams, will gather information about particular aspects of a project. So it might be [that] one group is focusing on lighting in a restaurant. Another group might be focusing on consumer behaviour. Other things might be related to materials and finishes. And then they put that together based on what they have found on the Internet -- even though we tell them to go to the library. And they’ll put together a PowerPoint presentation about their particular topic -- that aspect of the studio project -- and they will believe that they’ve just conducted research. And, I think it’s because we use the term research broadly in our department, and so, sometimes, information gathering is interpreted as research among our students” (EIP 7).*

Examples of research undertaken by graduate students are explained here in terms of topics and methods of research used. The purpose and products of graduate research are not discussed because it was evident that the products would be a practicum, a thesis, or a dissertation, and that the purpose of these products was for graduate students to demonstrate their knowledge about research methods and/or interior design.

Topics that graduate students undertook related to: (a) lighting; (b) colour; (c) materials; (d) creative and design processes; (e) design education; (f) design process; (g) historic preservation/restoration; (h) technology and/or computers; (i) workplace; (j) housing and other typologies such as healthcare environments, restaurants, hotels; and (k) issues such as the concept of hominess, placemaking, sustainability, or wayfinding.

With regard to topics, it should be noted that almost all participants suggested, directly or indirectly, that there was a direct relationship between a faculty member's expertise or interest area and the topics selected by graduate students. One participant also pointed out that students often select a topic based on the nature of the courses in which they are enrolled at the time topics are chosen. This participant stated, "part of it's a reflection of who's on their committee. Part of it's a reflection of what classes they're in when they decide their topic" (EIP 8).

Graduate students used qualitative and quantitative research methods including observation, interviews, and surveys. For example, a student at one university administered a test developed by someone else and did "some follow-up interviews with staff" (EIP 7).

#### **4.1.1.3 Facilities and Resources for Supporting Research (Question Nine)**

In the interview guide, the first part of Question Nine asked participants to describe the facilities and resources available for supporting research in their institution, firm, or organization. The second part of Question Nine asked participants whether or not, in their opinion, the facilities and resources were adequate.

In education contexts, facilities for supporting research were described by participants as those that were available for both students and faculty alike. Facilities included obvious ones such as libraries and computer centers. Three participants also mentioned having college-specific libraries. Numerous participants reported that they had materials resource libraries (EIP 3, 6, 7) and lighting laboratories, although the latter were used mostly for teaching purposes rather than for research. Only three participants said that the lighting labs were used by graduate students for research purposes (EIP 3, 4, 5). Although a few universities had access to unique facilities (e.g., a structural materials testing lab [EIP 4]), participants said that neither interior design faculty or students took advantage of these facilities (EIP 2, 3).

In terms of resources for conducting research, participants distinguished between those available for educators and those available for students. Resources to support faculty research included various levels or types of assistance with grant writing, and various resources for funding research. Some of these were internal sources specific to the college (EIP 3, 4, 8, 10), while others were resources available to faculty across the entire university (EIP 1, 3, 10). In numerous cases, the financial assistance available to support research was described as “seed



*Resources are “Adequate as far as doing the research, disseminating it’s another question. Unless you get a grant from an external agency, you’re paying your way to your conference to present the research. Travel money was hit with budgets. We get one conference a year. You know July to June is the fiscal year. My money was gone July 2nd. I was at a conference in Scotland -- it [the money] was gone. And so now -- but I’m expected to go to more conferences because I’m tenure track -- I’m paying out of my pocket. . . . Yeah, if there’s money left over at the end of the year, you know, we get an email. Anybody who went to a conference, that’s first thing, you know anybody who had to pay something out of their pocket, you know videos for teaching in a classroom or whatever, that will get reimbursed first” (EIP 8).*

money” to help new and non-tenured faculty write grants to help them gain larger grants in the future (EIP 1, 3, 10). According to at least two participants, tenured staff are expected to find their own sources for funding research (EIP 3, 10).

In terms of other funding resources for research, some participants reported that departmentally-based support was available occasionally (EIP 7, 8). With these occasional surplus funds, faculty are able to hire research assistants or are reimbursed for out-of-pocket expenses for travel to conferences. One participant explained:

If there’s funds left over -- which is kind of a joke, but occasionally there is -- and you need help on research, you might SHARE a research assistant with another faculty. . . . So that’s kind of nice. But it’s not an expectation. It’s not a given. (EIP 8)

Three participants reported having statistical consulting services available to them on campus (EIP 4, 5, 10) but, in one case, it is believed that faculty members had to pay for that resource (EIP 5). In another case, when asked about whether statistical services were available, the participant said:

That’s a funny one because last year I needed some help with, just, you know, I’ve got my data and its in SPSS [Statistical Package for the Social Sciences] and I THINK I’m running the right test, but I’m not sure. And I asked my colleagues, “Okay, who on campus do I go to?” And they said, “We used to have a statistics service but we think its gone!” So its either gone, or it has moved to a different department and no one knows where it is. I thought, “Okay, what do I do?” So, that study’s on the back burner right now because I’m thinking that, “Well, I

need to run this past someone.” (EIP 8)

Sabbaticals were also mentioned as a beneficial resource available to educators (EIP 5).

Student-specific resources for research included opportunities to apply for awards, scholarships or stipends from the department, university or professional organizations (EIP 9). One participant mentioned a student-initiated and operated annual conference which exposed students to research in interior design (EIP 3). The same participant also described design/build opportunities and labs where students could obtain hands-on or applied research experiences. Three participants described opportunities for students to be hired as research assistants either inside or outside the department or college (EIP 1, 9).

When asked whether or not they believed that the facilities and resources available were adequate, educator participants provided a range of responses. Some responses were positive (EIP 1, 10). For example, one participant noted that facilities and resources were adequate because, “Historically, interior design hasn’t involved expensive laboratory facilities and equipment or large samples of research subjects” (EIP 10).

Other participants thought that although some of the facilities and resources were adequate, more could be provided. For example, one educator thought that the facilities and resources for doing research are adequate but the resources for disseminating research are not. In this case, the participant was referring to the lack of funding available to attend conferences (EIP 8). In another case, an educator said that the facilities are adequate depending on the type of research that is being undertaken (EIP 7). Two participants (EIP 8, 9) said that the lack of consistent sources of funding for research, whether they be internal or

*“But, you know, the thing that is so distressing to me is, I mean, ASID, IIDA, even IDEC have cut out all their research grants. And I think its horrible! Its absolutely appalling. I mean, you know, how are we going get anywhere if nobody’s willing to put any money up for research?” (EIP 4)*

*“Faculty work hard in our field to get small grants and we have colleagues in the sciences and the social sciences who, you know, are pulling in HUGE grants and, uhm, but our culture is not really open to what I would call scholarship of discovery and scholarship of integration that requires original research. You know, our field just doesn’t -- they THINK they get it but they just don’t” (EIP 9).*

external, is problematic. Lack of funding for basic research was cited by one participant as being problematic as well (EIP 9).

Another participant said that there are plenty of facilities, resources, motivation, and ability to write grants, but no release time available to actually write the grant or pursue the research (EIP 11). In fact, several participants said that heavy teaching loads were a major reason why educators find it difficult to undertake research projects (EIP 7, 10, 11). An educator participant said:

Its not so much I don’t think that people don’t have resources, its that they don’t have time to take advantage of the resources. We all know that we can land grants. Its just that we don’t have the time to do the search, to sit down and formulate and develop our ideas. . . . We get nicked and dined to death with many many things. Right now, in this faculty, we have a new Director. So, that means that we’re all on new committees, redefining things -- which is fine. But, you take out six hours of committee meetings a week. We’re in studio 12 hours a week. If you’re a normal faculty, you’re teaching another course which is another three [hours]. Then you spend two or three hours in office time for students. (EIP 11)

Two participants thought that both the facilities and resources available for conducting research were inadequate. One stated that, “they’re not nearly sufficient” (EIP 9). The second said that, although the facilities were adequate, the resources were not. “You kind of have to beg for things,” said this participant (EIP 7).

#### 4.1.1.4 Examples of Using Research (Question Two)

Educators use research in teaching primarily to inform lectures (EIP 1, 3, 4, 5, 7, 8, 9). One participant stated, “I think several of us certainly use research in our classes. For example, [one faculty member] teaches a course on materials so I think that she’s always interested in looking for new industry research that supports the different materials that she’s talking about” (EIP 4). Another participant said, “When you use research in the classroom, you bring someone else’s research into the classroom and use it as an example or a case study” (EIP 1).

Only two participants mentioned using research to inform curriculum or program planning. One collected documentation about various programs across Canada and the United States for the purposes of conducting an informal comparison of interior design programs (EIP 11). Similarly, the other participant explained:

We’re going from a five year program to a four so we had to gather a lot of information from FIDER [Foundation for Interior Design Education Research] and NCIDQ [National Council for Interior Design Qualification] and colleagues at other universities. And we’re also working on a new masters program -- a one year master of interior design. Its in the works but it’s only a draft right now. So we’ve had to go out and do interviews and focus groups. So, it [research] impacts curriculum. (EIP 8)

Educator participants said that research is used by students in both studio (EIP 2, 3, 4, 7, 10) and lecture courses (EIP 3, 4, 5, 7). One participant noted, however, that the degree to which students use research depends on the instructor and how the course is structured (EIP 7). He said that unless research is included as a requirement within

*“I think the most frustrating thing, particularly in the studio with the younger students is, they research, they read research, or on some projects we often have them generate research and we try and work with them. And so, you know, its more than just looking at the Web, but I mean its making up a questionnaire and going out and talking to people and getting answers. . . . I think a lot of the problem is they do that and then they put it aside and do what they want to in their solution. So they don't do a good job of meshing the research to the project solution” (EIP 4).*

an assignment, students do not tend to utilize research-based sources.

Some participants commented on how undergraduate students often tend to use research at the beginning phases (i.e., during programming or concept formulation), and then neglect the research as they move on to different stages of the project (EIP 2, 6, 7).

Primarily, [students use research] in the beginning phases [of a project]. In fact, what happens around here -- and to a degree that I haven't seen before - - is [that] the design projects begin with a research phase which is usually over fairly quickly. And then research is never mentioned again. (EIP 6)

According to educators, graduate students tend to engage in longer periods of using research for practicum or thesis formulation purposes (EIP 3, 4, 5, 6). For example, one participant said:

The graduate students use it [research] more, for example, in reviews of literature. And, if you look at the masters degree as a place where you're beginning to develop some sort of specialization, then how do you do that? Well, you have to read about what's occurred in the area that you want to specialize in. (EIP 4)

#### **4.1.1.5 Sources of Research Used (Question Three)**

The sources of research used by faculty and students depends on the nature of the topic they're working on (EIP 1, 3, 4, 5, 7, 8). In one case, a participant said that the source of research used by graduate students depends on the student's advisor (EIP 8). If the advisor does not have a strong research background, then the student is less likely to use peer-reviewed academic sources relying, instead, on trade magazines and other similar sources.

Many of the academic sources used by educators and students are from outside the interior design discipline (e.g., education, creativity, organizational behaviour, business, engineering, physics, environmental behaviour, ergonomics, social anthropology). Other sources commonly employed are from within, or related to, interior design (e.g., *Journal of Interior Design*, *Journal of Architectural Planning Research*). The InformeDesign Website is used by faculty, graduate and undergraduate students alike (EIP 2, 3, 5, 7, 10). Several participants consider it to be a useful resource (EIP 3, 5, 7).

Besides academic or peer-reviewed sources, faculty, graduate, and undergraduate students use trade magazines from both within interior design (e.g., *Interiors & Sources*, *Interior Design*), and outside of interior design (e.g., *Assisted Living Today*, *Nursing Homes*, *Contemporary Long-term Care*, *Wired*, *The New Yorker*) (EIP 1, 2, 3, 6, 7). Undergraduates often use trade magazines as a source for images (EIP 11), or for “precedent studies” (EIP 3). One participant claimed that many undergraduates tend to believe that trade magazines are research-based, whereas faculty and graduate students realize that they are not (EIP 8). Another participant suggested that some undergraduate students realize the difference between research-based and non-research-based sources (EIP 3).

Other sources of research used by students were *Sweets* catalogues (EIP 10), governmental sources (EIP 3, 4, 7), conference proceedings outside of interior design (EIP 1), and “human” resources. In terms of human resources, one participant explained, “The other thing I find is that students will come [to see me with a question] and if it [the question] relates to research that someone on campus has done, they’ll actually go and talk with the person who has

*“They [students], you know, if they have to move much beyond their seat at home where they can look at the Web, they tend to get real unhappy about things. And the thing that really distresses us immensely, is that they think that everything they find on the Web is gospel truth. And it’s like, ‘Huh?’ No, anybody can put any kind of crap on the Web. You know, there’s no screening, there’s no peer review. There’s nothing. I mean, anybody can publish anything they want. So just cause its there doesn’t mean its accurate” (EIP 4).*

*“The problem is that the students are getting a lot of information off the Internet. And so we don’t know about the credibility of some of the sources. And I think, also, students haven’t been trained to distinguish between what is someone’s opinion or hypothesis as opposed to what are someone’s recommendations based on research. And in the architecture and design fields, there’s quite a bit of opinion that’s out there, and a lot of the design guide books too are really conjectures and hypotheses that haven’t really been validated yet” (EIP 7).*

done the research” (EIP 9). Numerous participants said, as well, that faculty and students use literature and white papers from industry sources or manufacturers such as Steelcase or Herman Miller (EIP 4, 5, 7 8, 10).

When asked about the sources that undergraduate students use, the overwhelming response from participants was, “The Internet” (EIP 2, 4, 6, 7, 8, 9, 10). Participants offered many comments which indicated that faculty were not impressed with students’ reliance on the Internet. For example, one educator stated:

Last year when I taught the final studio, the students were basing their findings on magazine articles from *Cosmopolitan*. I said, “This is not research.” So I made the students go to the library and get five articles out of REFEREED journals. . . . It was an eye-opener for them. They kept saying, “Well, why can’t I just use this article from *Architectural Digest*?” I said, “Well, that’s [a] nice supplement or something that gives you an IDEA, but . . .” And, you know, “Can’t I just download it?” they asked. “Well, yeah, if its from a peer-reviewed e-journal,” I said. (EIP 8)

Similarly, another participant said, “Well! As we all say, if they can’t find it on the Web, they don’t think its been invented yet!” (EIP 9). One participant did make a positive comment about the Internet, however. She said that since so much of the product information is now available on the Web, their college was able to reduce the size of their product resource library (EIP 2).

One of the interesting themes that emerged from the data concerned the issue of validity. Educators commented that students think that everything on the Internet is valid. “I swear, they think anything that’s on the Internet is valid and reliable. It’s pathetic, it really is,” said one



participant (EIP 8). In terms of validity, several educator participants thought that graduate students were better than undergraduate students at recognizing what was valid and what was not (EIP 5, 7, 8). For example, one educator commented that, “you have to question the source. And most graduate students or faculty are going to know to do that” (EIP 5).

#### **4.1.1.6 Research Needed (Question Five)**

Question Five asked participants if there was any research that they needed but had difficulty accessing, either because the research did not exist, or because it was just difficult to access. A slightly different version of this question was asked as well because it was believed that the way the question was originally worded did not yield the types of responses that I was looking for. The additional question was, “What kinds of research are needed in interior design?”

Questions about the kinds of research needed in interior design proved to be difficult for many participants to answer. Many educators could not seem to put into words specific topics that they believed needed to be researched (EIP 4, 5). Ironically, one participant answered the question by stating (and asking), “I think we have to start taking ownership of topics for interior design, I really do. Because if our discipline is unique, as we say it is, then what are the questions here that we need to be addressing?” (EIP 4)

Although participants mentioned a variety of topics that could serve as the focus of interior design research (e.g., human response to environment, materials, ergonomics, wayfinding, colour, lighting), their responses generally fell into one of three categories: (a) design practice, (b) design process and the value of design, or (c) spatial typologies.



*“I think the whole, the whole notion of practicing interior design hasn’t been really taken seriously, uhm, as a kind of research agenda. So, you know, you could go the history of interior design practice. You could say how do interior designers in the last twenty or thirty years, how has that practice sort of evolved and changed? And that would be a fascinating subject is just how do you manage offices in interior design? And then you would sort of get into, you know, the whole management business and the business of interior design which is rapidly changing and being combined with a lot of other design disciplines because what we’re finding out is that when firms come here, they’ll want to hire graphic designers, digital designers, interior designers, and architects. They’ll look at all these people because they’re going to offer a RANGE of design services for their clients” (EIP 11).*

A few participants said that there needs to be research on the nature and history of interior design practice and how interior design is practiced (EIP 3, 9, 11). “It seems like every masters student is asking questions about how we’re teaching or how we’re integrating technology into what we do. But they’re not asking questions about what we do” (EIP 3). Two participants explained the need to utilize practice as a source for identifying relevant research problems (EIP 1, 4). One of these participants said:

I think in everybody’s practice, big issues or questions keep coming up repeatedly, and those are the questions that need to be put out there in the public domain so that people who are looking for things to research would have a pool of things that they could get interested in. . . . Talk to practitioners. See what kind of questions they need answered. (EIP 4)

In terms of design process, some participants said that research is needed to help explain, rationalize, objectify or de-mystify the process. One participant said, “We have a lot of things that we do by gut instinct, or just our experiences which is not necessarily based on a body of knowledge that’s been researched” (EIP 5). Several participants also suggested that research is needed to demonstrate the value of design. One of these participants said:

I think that if we begin to more seriously address rationales for our problem solutions that are based in research, that we will increase the perceived value of interior design. I mean, if you can say to a client, “Research has shown that doing X, Y, and Z will help increase the bulk productivity of your company.” I mean, that’s what they [clients] want to hear. I

mean, to say, “Well I did this because I though it looked good, or I liked it, or it was pretty,” or all the other stuff we say, is just offensive because we’re not grounding ourselves in anything that’s solid. I’m not saying we have to do away with aesthetics because I don’t believe that. But, there has to be more to it than just that aesthetic base. (EIP 4)

In terms of spatial typologies, some educator participants suggested that research is needed on: (a) hospitality (EIP 4, 7), (b) retail (EIP 3, 4), (c) school (EIP 3), and (d) assisted living (EIP 10) environments. One participant offered an explanation with regard to the need for typological research. She said,

When we do a retail studio, the students check out books about retail design and will always peruse the latest offerings in retail design. And its really about the visual design of retail, but there’s no information about why stores are the way they are. You know what I’m saying? So, things that connect interior design with the cultural and organizational issues that surround it, you know, the building typologies are not well-documented. An article about school design will show all these different classrooms but it won’t talk about classroom design and its connections to curricular structure. Or, it won’t talk about the different forms that schools have taken and the economic and sociological and kind of issues that surround schools. . . . I think that if there was a way to connect information about the visual design of those spaces to why they are the way they are, I think that would be a really interesting -- like a cultural history of stores. . . . I think that students design to the paradigm they see. So, if they’re

*I think there are questions that are unique to what we do. I mean, you know, ergonomic questions, you know those are certainly measurable. There’s materials questions, there’s post-occupancy evaluations which could be infinitely valuable to many, many, many people. I just think that we need to take some questions and maybe even piggyback on some other peoples’ research and say, ‘How can we make this unique?’ I think we have to start taking ownership of topics for interior design, I really do. Because if our discipline is unique -- as we say it is -- then what are the questions here that we need to be addressing?’ (EIP 4)*

designing a store, they know what a store is, but they never think about what a store COULD be. And its kind of unfair of us, as studio instructors, to ask them to make those leaps without them being able to do some research and say, “Well, why are stores the way they are now?” (EIP 3)

In terms of the kinds of research needed, a few references were made to the need for theoretical, exploratory and experimental research (EIP 9), as well as quantitative and qualitative research (EIP 4). Most participants agreed that both basic and applied research are needed, but that there is a need for applied research in particular (EIP 1, 3, 4). One participant said:

You know, we’ve all read research. Quite frankly, sometimes research is put in such highfalutin terms its like, “What in the heck? Just tell me the bottom line here. What does this mean for me? Is this going to help me be a better designer?” So, that’s one of my criticisms of research. I think it [research] could be made more user-friendly. (EIP 4)

Another participant commented that, “If we really want to add to the body of knowledge, then it can’t be ivory tower because then its not really adding to anybody’s knowledge because its not impacting the bottom line” (EIP 1).

Finally, there were mixed opinions about the value of post-occupancy evaluation (POE) research. While some participants believed that the results of POEs could provide educators with rich teaching material (EIP 2, 4, 5, 7, 11), a few others were less certain about the value of POEs. One of these participants said, “A POE doesn’t mean much if you haven’t designed it. If you don’t know what went into the design – intimately know what went into the design process – how can you evaluate? You can be a critic but that’s not

post-occupancy evaluation” (EIP 6).

#### 4.1.1.7 Sources of Research Needed (Question Six)

In the context of education, the majority of participants thought that research endeavours should be a joint effort between educators and practitioners (EIP 1, 2, 3, 4, 5, 9). These research partnerships, though, meant different things to different participants. One participant believed that practitioners should simply fund research (EIP 3). Others believed that practitioners should take a more active role in conducting research. One participant pointed out that practitioners have important links to clients, which academics do not have, yet need, in order to conduct relevant research (EIP 5).

Some participants identified a few of the barriers that seem to prevent research partnerships between educators and practitioners. For example, one educator said, “Partnerships would be terrific if we could get them going,” but practitioners are hesitant to actually enter into such partnerships with academics because practitioners do not value the research done by academics (EIP 4). Another participant explained that educators need to make realistic proposals to practitioners. This individual said, “We have to get our act together. You can’t just go and say, ‘You know, I want to do this.’ You have to create a business plan connected to a research plan” (EIP 1).

Several participants thought that professional organizations have a role to play in terms of providing funding for research (EIP 2, 4, 5). Another educator thought that a good role for professional organizations would be to act as a broker or vehicle “for helping to bridge the gap and actually bring researchers and practitioners together” (EIP 9). Two participants acknowledged that the American Society of Interior Designers (ASID) and the InformeDesign

*“The only way that I think you can get practitioners involved would be if they linked with an educator. And then, as a team, they might be able to approach some things that. Like, if a designer is working on a particular project, you might be able to integrate research with what they’re doing. And that’s a possible way. Or, some of the post-occupancy evaluation that could be done. I think that’s a good way -- if we get enough of it then -- on a particular topic -- then there’s a possibility that we could take that further because while there are a lot of variables, if you have many examples that come out with the same results, I think you can learn from post-occupancy evaluation. And I think practitioners could have the key to the kinds of contacts you would need for that type of research. So that’s just one thing. But, until people are willing -- until organizations and all the different possible sources of funding are willing to fund it, I don’t know if its going to happen” (EIP 5).*

*“Educators need to write and publish. And practitioners need to do the job. The question is, ‘Why aren’t we marrying up as teams?’ That’s where real team work and collegiality comes in” (EIP 1).*

Website that the organization helped sponsor is attempting to link researchers together (EIP 3, 5).

A few participants mentioned the need for interdisciplinary research (EIP 5, 10). For example, one educator commented:

In today’s practice, large and complex facility design (e.g. healthcare) requires a team approach with each member contributing specific expertise. Interior designers offer unique skills that complement those of other design professionals on the team. More of that same type of collaboration is needed in design research. (EIP 10)

One participant reiterated a potential pitfall of interdisciplinary research. Interdisciplinary research is beneficial as long as research questions can be included that are unique and relevant to interior design (EIP 4).

#### **4.1.1.8 Disseminating Research (Question Seven)**

In terms of how research should be disseminated to interior design stakeholders, responses focused on discussions of the format for dissemination, and the individuals or organizations who should disseminate research.

In terms of format, participants in the education context mentioned, most frequently, that there was a need to disseminate research in both print (i.e., books, magazines, and journals) and electronic formats. One participant commented that print sources are needed because individuals who are not comfortable with technology prefer to go to the library (EIP 8). Another participant commented that educators still like students “to go to the library because there are journals that are not Web-based” (EIP 5).

Participants said that disseminating research on the Internet is ideal because most educators and students are

comfortable with obtaining information from the Internet, and because the ability to access information from almost anywhere, at any time, is convenient. One participant was an adamant supporter of the Internet, and made this comment:

I'm not so sure that we need journals that are not electronic because I don't see the utility of them long-term. I wouldn't be a proponent of putting things into a text. Having said that, I like to be able to print it off, for myself, at least some portions of electronic material. But, to have to get the journal in paperback form is SLOWER I think; not as immediate. AND, it doesn't have the richness. You know, you can really add -- since we're all visual learners or 70% of what we learn is through the visual medium -- a visual richness to these journals. . . . If I were doing an ethnographic study, then I could do a small video clip that could be put on to that to show that social anthropology is important to study in design. How much more fun would the learning be and therefore, how much more engaging? (EIP 1)

One participant had some concerns about the Internet and said, "It's the expedient way. I think it's a comfortable way," but it may not be the best way to promote "deep learning" in either students or practitioners (EIP 9).

A number of participants described the benefit of, and further need for, Internet sites that act as clearinghouses for information. For instance, several participants (EIP 3, 4, 5, 7, 10) said that the InformeDesign Website is "terrific" (EIP 7) because it has research summaries, it amalgamates design-related information into one site, and because it's a good way of getting practitioners "interested in what's out there" (EIP 4).

*"I think books are still useful, but the World Wide Web is a great way because you know students, at least our students, use CAD MOST of the time now, and it, uhm, you know, they can actually go from AutoCad straight to the Website and get information that might be useful, you know research that might be useful for them when they're doing their space planning or designing. You know, they don't even have to get up from the workstation. But I do think there's still a place for books and magazines, periodicals, you know, print matter" (EIP 2).*

*“I think that that newly established Website, InformeDesign, is terrific because, I mean, its right there, and they’ve got all these articles. I don’t know if I always agree with all the summaries, but at least you can go and review that article yourself. So I think that’s probably the greatest source. . . . when its all consolidated into one Website, that’s great. . . . it would be great if there was also one Website that looked at more technological concerns related to different products rather than having to go to each manufacturer individually” (EIP 7).*

Some participants suggested that Websites similar to InformeDesign are needed for “technological concerns related to different products,” sustainability, and other issues. Such Websites would reduce the need for designers to have to go to each manufacturer’s Web page or to numerous sites to get the information they need (EIP 7). In the opinion of one participant, what is needed is a “really authoritative source on sustainability that one could go to with confidence, instead of relying on unprofessional research. . . . a simple source to go to that collates all the issues of function, cost, and sustainable issue about various products and product areas” (EIP 6). Another participant said that what is needed is a more usable tool in order for undergraduate students to be able to access environmental information without having to go “through the hoards of information on the Internet” (EIP 2). Other participants also mentioned the need for objective, “authoritative sources” (EIP 6) on sustainability (EIP 3).

In the opinion of educator participants, conferences, seminars, and trade shows are also valuable ways of disseminating research. These events enable educators and other researchers to experience research first hand (EIP 7), and are a valuable way to learn about things through “word-of-mouth” (EIP 8).

In terms of who should disseminate research in interior design, participants thought that educators should continue to play a role in doing so. Some participants also thought that educators should help practitioners capture and disseminate knowledge from practice (EIP 11), and that students could be encouraged to write about their projects so that they would be trained and would continue to do so in practice (EIP 1). Other participants thought that practitioners should disseminate, at conferences,



case studies or lessons learned from the projects they have worked on (EIP 1). Others thought that professional organizations have an important role to play in disseminating research.

#### **4.1.2 Perceptions About Research in Professional Practice**

##### **4.1.2.1 Definitions of Research (Question One)**

Practitioners' perceptions about research seemed to depend on the position they hold, and on their educational background. For example, participants who are principals or partners within a firm, those who are senior managers, or those who hold unique positions (e.g., a programmer) seem to understand what formal research is. Many, but not all, participants in these positions said that even though they may not use such formal research methods in their day-to-day jobs, they are aware of such methods since they were "trained in the empirical model" (PPP 11), had completed a thesis using formal research methods, or had some other experience with formal research.

When asked to define or describe research, junior, intermediate and senior designers usually offered an example of doing research as opposed to actually defining what it was. When probed further about how they would define research, most participants stated that it was basically information gathering related to whatever project they were working on at the time.

Junior, intermediate and senior designers often described research as gathering information about a client, a product, a material, a building code issue, or just general information for a project. One intermediate practitioner called such project-centered investigations "research on demand" and added, "I really don't want to know about it

*"Research is anything related to looking up information and finding criteria so that we can design a project properly. . . . So its, ah, its anything. Its looking at precedents in design. It is looking at the [building] code. It is looking at furniture. Its looking at materials. Its speaking to the client about their history and what they've done. All of that" (PPP 3).*



*“When you’re talking to someone who’s been brought through a traditional design-oriented curriculum, in either architecture or interiors, the experience that I’ve had both as at this firm and at others is that the term research is used very loosely. And that terms means, ‘I need to go out and research this information,’ which might be going to a product manufacturer to understand what material choices pass the particular state flammability codes or whatever that might be, or going out to find out what options there are on alternative workplaces, what trends there are on work environment sizes, that kind of thing. Uhm, basically going to gather primary work from someone else and bring it back in a way that can then be used. So, it’s the gathering function, not the generating function. For people who have been through a research curriculum, it’s a very different conversation. And, some of the examples that I have to give you, ah, for question number 8 will hopefully make that a little bit clearer, but generating new knowledge -- the language around that is dependent on the education prior to joining the company. There isn’t a program in place at the company to teach research skills to existing employees” (PPP 12).*

unless I have to actually physically use that information because I don’t have a lot of time” (CSP 8). Reinforcing this statement, the principal of a firm said,

I would say that most designers or most employees would consider research not basic research or not empirical research, but product research, project research, looking at similar past projects, or similar past applications of a solution, whether it’s of material or a piece of furniture, or a design idea. (PPP 11)

Another principal suggested that, at their firm, it was “Capital R and small R,” implying that research is understood in both formal and informal ways (PPP 5).

A number of junior, intermediate, and senior designers made reference to doing research as a way to become inspired. So, looking at magazines or seeing an exhibition was, for them, a way of becoming aware, informed, and knowledgeable about a variety of issues. This awareness, in their opinion, constituted research (CSP 6, 12). One intermediate designer said:

As designers, maybe how we do research is to really kind of be a sponge and absorb everything that we can in hopes that one little speck of something that we pick up will help us with the next thing that we have to do. (CSP 6)

Regardless of their positions, practitioners had mixed feelings about whether or not design was a form of research. For example, one participant said:

Usually when I think of research, I think of the pure scientific. You know, start off with a clean slate and have a concept and kind of build upon that concept. I guess if you look at it from a real pure perspective, I’m not sure it [design] really counts as research.

Does it count as something -- kind of studying and understanding? Yeah, definitely. But is it PURELY research? No. Its maybe making our heads a little bigger than they should be. (PPP 6)

#### 4.1.2.2 Examples of Research Conducted (Question Eight)

Examples of research conducted in professional practice are described in terms of topics, methods of research used, purpose, and outcomes.

Within practice firms, research was often undertaken to learn about: (a) products (hardware, furniture, furniture systems); (b) materials (flooring, wallcovering, textiles); (c) building code issues; or (d) precedents. In addition, “benchmarking” research was also conducted on: (a) industry standards (e.g., space standards, ratios of open to closed offices, etc.); (b) projects completed by the firm; and (c) a firms’ own performance. A great deal of research was also done on spatial or building typologies (e.g., workplace or healthcare facilities).

The methods of research used were both informal and formal. Informal research methods included: (a) scenario-building (i.e., designers asking questions of their clients and of themselves about different design possibilities or situations); (b) in-house “lunch n’ learns” or seminars; (c) recalling or referring to past experiences or past projects; (d) consulting in-house or external experts; (e) reading white papers; and (f) collecting clippings from magazines, newspapers and other sources. Formal research methods included qualitative and quantitative data gathering. Quantitative research techniques were used most often for employee productivity and/or satisfaction surveys, client satisfaction surveys, assessments of a firm’s performance on projects, or for gathering programmatic data. Qualitative research techniques were used for open-

*“I think parts of the [design] process involve research but I think the overall creative process is not a research-based process” (CSP 6).*

*“Yeah. It’s [research is] always project-driven. It’s never research for the sake of research. And that’s partly because there’s always a pressure in any company to make sure that as much of your time is billable as possible. And so if any clumping around in libraries is going to happen, it needs to happen on the client’s nickel. And so that’s just a pragmatic reality” (PPP 13).*

ended interview or survey questions or for person-to-person or group interviews, as a means of gathering programmatic data. Other research techniques mentioned less frequently included prototypes and/or mock-ups, behavioural analysis observational studies, site visits, pedestrian traffic studies, and POEs.

According to practitioners, research was undertaken for particular projects; marketing purposes; or for developing, monitoring, and assessing internal processes and procedures. Participants explained that research was rarely undertaken without a specific project-related purpose because, “rarely is the firm in a position or able to fund just pure research for the sake of research” (PPP 6). Another participant said, “In our profession we tend only to do research relative to projects because we don’t have the professional fees to support the ability to go out and say, ‘Okay. Let’s go find out more about this.’ We just don’t have the capacity to do that” (PPP 4).

Project-specific research often focused on gathering information related to materials, products, or programming. Research on materials, for example, was often done to determine the correct procedures for a product’s application, maintenance, or installation so that costly mistakes could be avoided, or to investigate a problem with a material’s performance. Research related to programming often centered on trying to ascertain how end users were planning to actually use a space. For example, one participant explained that, for a workplace programme, research might centre on obtaining answers to questions such as, “What are these people really doing at work? How often are they really in the office? And when they’re in the office, are they in meetings or are they doing heads down work?” (CSP 9)

Interestingly, many participants were uncertain as to whether or not programming was a form of research. For example, one practitioner said, “We’ve also gone as far as to do programming which isn’t research specifically, but it’s a derivative of it” (PPP 14). Another participant stated, “Designers tend to think that a lot of what they’re doing in the course of programming is research, and it’s not. It’s really data gathering. But they’ll sometimes refer to it as research” (PPP 13).

Marketing research was undertaken by practitioners in order to become aware of current issues and future trends, an awareness often necessary for securing clients. One participant said that their firm does marketing research by “being aware of world events, being aware of the market place, and understanding what our competitors are doing” (PPP 4). Another practitioner said that their firm “collects and seeks out information that will be useful at some point to a client in the future, or to obtaining a client in the future” (PPP 13). Sources of current issues and future trends included newspaper clippings, white papers, government reports, and conferences.

Another reason practitioners engage in research is to monitor and assess internal procedures. Again, however, participants hesitated to refer to these activities as formal research endeavours. One participant said,

I wouldn’t call this research – it’s just a little more disciplined inquiry into improving and streamlining and codifying our own methods and procedures here. So, it’s a little bit less free-form and a little bit more focused on quality control and consistency of our methodology. (PPP 11)

Another practitioner at the same firm explained why internal performance procedures are important to monitor. He said,

*“I would say on almost, you know, any project now the junior staff or intermediate staff is expected to do or asked to do research on particular issues to a client or client specific information. So, to both better understand the issues facing them, but also the client and what their business objectives are, what’s important to their business. Uhm, what industry trends are affecting their business and what that might do relative to a solution, ultimate solution” (PPP 10).*

*“One of the other areas of research that I’ve done is product research. Typically, I only engage in this type of research when we have a problem. For example, I’ve done a major study on plastic laminates because, in one job, the plastic laminate stained, the color bleached out. Of course, the manufacturer was never going to admit that there was a problem. But our firm was interested in the cause of the problem. So, I actually had a mini laboratory set up where I was testing all the different chemicals and using some of the testing techniques that they use in a REAL lab. Through my research, I found that there was a significant difference in how each plastic laminate failed. But the end result was that the client was using the wrong materials to clean the laminate.*

*When I say, ‘We have a problem,’ potentially, WE will have to pay the cost of replacement because manufacturers will always find SOME way of saying that their product didn’t fail.*

*Typically, manufacturers will say that the user abused the material. And then, when the client can’t get a replacement from the manufacturer, they’ll come to us and say, ‘Well, you spec’d [specified] the wrong product’” (CSP 10).*

“Since the fees are getting smaller and smaller, we have to continually ask ourselves, ‘How can we deliver this project faster?’” (CSP 10) A practitioner at another firm said that their principals have an ongoing interest in assessing their performance “in terms of fiscal management, in terms of internal processes, in terms of the happiness, satisfaction or productivity of individuals,” and that they use both qualitative and quantitative measures to assess such factors (PPP 8).

In terms of research methods, it was clear that practice firms prefer quantitative data gathering techniques. Generally, most firms seemed interested in codifying information to create quantitative databases that allows them to have quick access to information.

Research outcomes or products within professional design firms typically included: (a) internal documents (e.g., presentation or drawing standards, employee performance or satisfaction surveys, client satisfaction surveys); (b) project-related documents (e.g., furniture inventories and standards, proposals, programmes); (c) white papers (on trends such as workplace and technology); (d) magazine articles (about completed projects); (e) presentations of completed projects; and (f) reports (annual reports, benchmarking documents).

#### **4.1.2.3 Facilities and Resources for Supporting Research (Question Nine)**

For many practitioner participants, the question about facilities and resources for supporting research was interpreted as being facilities and resources for doing design projects rather than for research per se. Again, this equivocation probably occurred because most practitioners did not consider the majority of their work to be research.

Most participants reported that, in terms of facilities, they have the “regular” things that most employees in design offices today have: (a) a workstation with a computer and a telephone, and (b) access to other standard office equipment such as fax machines and photocopiers. All participants, with the exception of one, stated that their firm provides employees with Internet access at each workstation. The one firm that did not provide individual Internet access had installed several Internet stations throughout the office. A principal of that firm claimed that, from an economic viewpoint, the firm could not justify employees using non-billable time to browse the Internet (PPP 11). In this firm, and others, an Intranet was created to provide employees with all of the proprietary information, knowledge, and tools necessary to do their jobs.

Most participants reported having a product catalogue and sample library. Larger firms also had either a part- or full-time resource librarian who was considered to be an “invaluable” resource. Other resources mentioned frequently were various product or industry representatives including contractors and builders. Product representatives were considered to be an extremely important source of information for designers because product knowledge changes so quickly that it is difficult for designers to keep abreast of all of the new developments (CSP 13).

Other human resources included in-house specialists and designers who had many years of experience in the design profession. During the focus group session, participants agreed that it was easier and quicker to go and ask an in-house expert for information rather than to find the information on their own. One practitioner stated, “I consider our people one of our biggest resources in terms of finding information” (PPP 4).

*“I think you have to, in the process -- because the fees are so tight -- you have to do it quicker, or you don't have as much time to think through, you really have to come up with solutions based on your personal experience, your involvement of your team members. That puts a crimp on being able to do really creative, great research and dig into a number of different issues. I DO think in this course of a project though, usually there's one or two battles that you can look at and focus on and can win. . . . The other thing is that -- hitting on this point though about access. We have to be quick about it, fast. That's why we use the pool of resources in our office, and we go to an expert that has real expertise in that area” (CSP 4).*

For practitioners, past projects were a valuable source of information. One participant said that, “Our other resources would be our wealth of project history – all the projects and drawings and examples of work past” (PPP 11). At another firm, most of the projects are posted on the company’s Intranet so that employees can look up precedents, and retrieve images from past projects to use in creating presentations for new clients (PPP 4). A third firm has an in-house area where past projects are stored, and has an off-site archival storage system as well (PPP 5).

Most participants considered their facilities and resources to be adequate because the facilities supported design work rather than research. An exception to this finding was expressed by an employee at the firm where individual access to the Internet was not provided. This practitioner implied that personal Internet access was important because, “Information is, to me, the key to success in our job. Access to information is the number one thing that I need to do my job well, and to do my job efficiently” (CSP 12). A participant at another firm said, “Would I like to have more [resources]? Yeah, I would, but you can only spend so much, annually, on building that base of knowledge” (PPP 10).

#### **4.1.2.4 Examples of Using Research (Question Two)**

When asked at what point during a design project designers at their firm used research, participants provided a range of responses which indicated, overall, that designers use a great deal of research or information in almost every aspect of design. Beyond design, however, some participants said that research was also used to obtain new clients. In these situations, designers showed clients research (usually consisting of white papers, benchmarking statistics, or summaries) that the firm had done or that the



firm had amassed about trends within certain industries or about certain issues (PPP 4, 6).

Some practitioners said that research is used more at the beginning phases of a design project (PPP 1, 9, 14). For example, one individual said:

I would say that research tends to be conducted at the beginning. Certainly when you're trying to get a handle on what are the most appropriate, creative, newest, best functioning products to achieve a certain, in many cases, look, because the products are all very comparable in their performance or their features, but it may be a certain fabric or panel style or configuration that you find unique. So I'd say its probably in the late schematic, early design development phase where you would do the most research related to products and materials. (PPP 14)

The majority of practitioners, however, claimed that research is used all the way through a design project because different issues arise at different stages of each project (PPP 3, 4, 5, 6, 7, 8, 10, 11, 13). One participant explained, "I suppose it would be, at the beginning, more about space, user, or building type, and then, later in the process, it might be about materials applications or assemblies" (PPP 5). Another participant said that research for projects "goes from the very broad to the very specific" (PPP 4).

Whether research was used at the beginning of, or all the way through, a project, numerous participants acknowledged that some projects required the use of more research than others. The quantity of research used depended on the complexity of the project, whether or not design standards existed for the project, or whether or not design standards were being developed for the project (CSP 5).

*"I think research is used in every project and research is used in every phase of every project and probably every day. And its just [that] people are not cognizant that they are applying the products of research" (PPP 8).*



When asked to explain why designers use research, two participants said that research was used to establish a business or strategic plan for clients (PPP 10, 12). Several said that research was used, in a general way, to inform project-specific problems (CSP 5, 8, PPP 6). The greatest number of participants said that research was used to investigate project-related information about clients, products, furniture, equipment, or code issues. Only one participant said that research was used to convince clients that the proposed design solutions were valid (PPP 12).

Indirectly, it was also clear that research was used to inform some of the internal processes and procedures developed by some firms. For instance, employee satisfaction surveys (CSP 1), and customer service surveys (CSP 9, PPP 8) were described as being based on the research done by Kaplan and Norton (1996) and others (PPP 8, 11).

#### **4.1.2.5 Sources of Research Used (Question Three)**

Practitioners rely on a range of sources for obtaining both formal research and general information. Typically, these sources include printed materials, the Internet, and human experts. Sources where formal research was obtained included the *Journal of Interior Design*, the InformeDesign Website, or similar peer-reviewed sources. General information, that was not necessarily research-based, was obtained from trade, popular culture, and business magazines such as *Interiors & Sources*, *Wallpaper*, and *Fast Company*, and from the Internet. Numerous participants said that professional organizations such as ASID, the International Interior Design Association (IIDA), the International Facility Management Association (IFMA), the Building Owners and Managers Association (BOMA), the Buffalo Organization for Social and Technological Innovation

(BOSTI), and the Corporate Real Estate Network (CoreNet) were consulted frequently to keep abreast of new trends or issues within interior design and related industries (PPP 11, 12, 14).

Most often, practitioners used the Internet to obtain information about specific products, clients' companies or services, or current issues or trends. Although practitioners were concerned about the validity of some of the information available on the Internet, most considered the Internet to be valuable because it provided quick access to information. One participant explained that information has to be easily accessible, and "easy to read and understand so you can get in and look at this thing in a minute or two and look at a product and understand that generally this will meet your need whatever that may be" (CSP 4).

For practitioners, external experts were also an important source for obtaining information. External experts included: (a) lighting, art, mechanical, electrical, structural, acoustical, building code, or millwork consultants; (b) contractors; (c) environmental engineers; and (d) specifications writers. "We've been using our trades and our contractors as a resource because I'm finding that designers don't have enough experience . . . builders have that," said one participant (PPP 1).

Another important external source of research and information for practitioners were industry or manufacturers (e.g., Haworth, Steelcase). Practitioners made frequent references to using manufacturers' representatives, product literature, white papers, and continuing education courses as regular sources of information. In some cases, however, a number of practitioners were somewhat leery about the information provided by industry representatives. One participant said,

*[Designers tend to have] "a heavy reliance on manufacturers. So what Herman Miller puts on their Website, or Knoll, or Haworth, etc. -- what they post as research or case studies. I would say the industry has more reliance on case studies than they do research partly because they're faster, easy to read; they don't have the burden of the reader to understand research methodology. And in some cases, they just come out much faster -- there's more to draw from" (PPP 5).*

*“Some of it is the individual expertise of designers in the office, or in any of the offices. Some of it comes from what we’ve learned on previous projects. And some of it comes from manufacturers who are a GREAT source of information actually because they DO have the funding to do great data collection that is useful to clients, of course. And, that’s why they do it -- and [its useful] to designer. And some of it comes from trade periodicals. Or speakers at conferences. I always make various notes” (PPP 13).*

Sometimes, you have to rely on someone that you maybe don’t necessarily want to rely on . . . because a vendor is selling you something, right? So its in his best interest to -- he want to sell it to you, and so he may stretch a little bit what a product is capable of. And you’re kind of at their mercy. You know what I mean? So, I think that’s kind of the danger of product research – you’re dependent on what that manufacturer is telling you. (PPP 4)

In addition to the external source described so far, many participants also described a variety of in-house sources consulted or used regularly. For instance, in-house seminars; white papers done by the firm; or a firm’s Intranet, past projects, and benchmarking were mentioned as valuable internal sources of information. Numerous participants also made reference to obtaining information from co-workers and resource librarians within their own office or in another branch of their company (PPP 4, 9, 13). One participant said that she regularly consults “Resident experts. You know, some people here are really good at certain things” (CSP 12). Another participant explained how benchmarking is used:

We use a lot of benchmark data. We benchmark every project that we have here. So, we have a pretty good resource of industry standards, and our [own] standards, that we use for comparison purposes. So, if someone is saying that they need 500 square foot offices, we can say, “Well, here’s what everyone else is doing, and here’s what we’ve been doing. And maybe you should go that route.” (CSP 9)

In addition to external and internal sources for formal research and information, designers relied, heavily, on their own past experiences. One participant said:

I would say that we're so overwhelmed with information, that 90% of the time we just ask ourselves, "Okay. How did that work out last time? Did we use that before? Was it good? Was it bad? Indifferent?" So, I think a lot of the information we use is stuff that we just pick up along the way. (CSP 8)

#### 4.1.2.6 Research Needed (Question Five)

Practitioners' perceptions about the types of research needed in interior design are described in terms of topics, research methods or types of research needed, and purpose.

Overwhelmingly, the most frequently mentioned topic that practitioners claimed more research was needed on was that concerning the value of design. According to practitioners, designers need research on the value of design so that "they can say, with a pretty high degree of certainty, that if you hire us, we will yield you X amount of cost impact, savings, profitability, or whatever" (PPP 11). Affirming this statement, another participant said:

I would say all designers need this. And that is research that will prove the value of design. In other words, if I could say to clients, "Here are three studies that have been done in the last two years that prove that if you provide access to natural light for employees, productivity increases by 15%," or something like that. Or, something that would establish that acoustics in a workplace has an effect -- positive or negative -- on productivity or absenteeism, or anything like that. And there's lost of studies that are a little more obscure which, frankly, most clients aren't really that interested in. You know, the effect of fiber content of carpet on

*"Does design truly impact people, or is it just this kind of money-spending, you know, black hole that businesses or companies need to put money into?" (PPP 6)*

*[Clients are interested in research] “that, you know [addresses questions such as], ‘How do I improve employee effectiveness? How do I improve productivity? How do I keep people?’ You know, ‘What creates a happier workplace? What improves moral? What should my, if I build all closed offices, what happens to my culture of my company? If I build everybody an open office, what happens to the culture of my company?’ That kind of stuff” (PPP 6).*

five year old children and their future learning ability. That’s all great research, but the kind of research that the design world is crying out for, and [that] would go a long way towards increasing the credibility of the profession, is proving the case for good design -- being able to prove that design has a tangible, measurable impact on peoples’ job satisfaction, their health and happiness in the workplace, and their productivity in the workplace. Because, ultimately, what you’re wanting to prove is that design will have a positive impact on the client’s bottom line -- that good design pays. (PPP 13)

One participant acknowledged that although there may be one or two studies that exist about the value of design, “there’s not a BODY out there of research” on the topic of how design provides value to clients (PPP 4).

Two practitioners acknowledged the difficulty in doing research on the value of design. One practitioner said that not only is it difficult to isolate the variables that would demonstrate increased productivity, but also because human beings “are, in fact, the most adaptable creatures on the planet . . . people can do great work under the most miserable conditions if they are so motivated” (PPP 11). Another participant said that, “So, the value of design -- while its there, its evident, it IS a MUST, and it does improve things for people, its hard to document it” (PPP 3).

A second topic mentioned by practitioners relates closely to the value of design. According to some participants, research is needed to help interior designers understand the issues faced by clients which, in most cases, are business issues (PPP 2, 4, 12). Since clients want “a BUSINESS reason to support why they’re doing what they’re doing” (PPP 4), interior designers need to understand

business, real estate, and organizational structures. Clients are not interested in what designers have traditionally offered as justification for what they do: “design intuition, design training, design aesthetics issues, or judgment calls in many cases” (PPP 12).

Numerous practitioners also mentioned the need for objective research on sustainability, products, and technical information. These individuals also mentioned that research on these topics should be assembled into comprehensive Internet databases similar to *InformeDesign*. One practitioner called the existing research on sustainability “industry-driven green-washing” (PPP 6), and suggested that research from an objective “third party” would be valuable. Other practitioners complained that the only place to get technical information is from manufacturers representatives. An amalgamated database of products and technical information -- particularly of hard-to-find products such as hardware -- would be valuable “because you wouldn’t have to wander all over the place, wasting a lot of time” (PPP 9).

Practitioners, as a whole, were not very specific about the types or methods of research needed in the profession. Although some participants mentioned the need for both qualitative and quantitative research, some implied that quantitative data would be more preferable. For instance, one practitioner said that, “The only way to increase the profession’s credibility is to provide statistical data relative to the work that is being done and its benefits” (PPP 10). Another commented that clients are not as understanding and accepting of the design process for the built environment because it is lacking empirical evidence (PPP 5). There was also some indication that case studies are “far more digestible and far more applicable” (PPP 11)

*“I believe that the design profession and academia could do a much better job of collaborating to advance design related research. Its an aspiration that I have heard over and over again for the last 10 years but the profession and the schools have not made any real progress toward that goal. Most medium to large firms regularly skim over amazing amounts of rich data but don’t have the time to study or record the information. If we could figure out how to pair graduate students with the right firms and the right project opportunities, then I believe we could make dramatic progress. Good research that demonstrates the effective, positive impact of design is absolutely essential to advance the profession as a whole” (PPP 8).*

for practitioners to utilize than empirical or formal research. One practitioner commented that although formal research is necessary and valuable, from a practitioner point of view, maybe there needs to be a:

“Research lite” that will speak to the practitioner in language that is easier to understand, easier to translate to clients, and is more specific. It may not be statistically correct, but if it shows that there’s value in design, or ASSERTS that there is value in design, clients will listen to it. (PPP 13)

#### **4.1.2.7 Sources of Research Needed (Question Six)**

While some practitioners thought that either academics, practitioners, or professional associations should be responsible for creating research in interior design, the majority thought that joint efforts between two or three of these groups would result in the most objective and beneficial research for the profession.

Of those who thought that only one specific group should be responsible for research in the profession, one practitioner claimed that universities should produce the research needed. This individual said, “That’s the role of academics – to raise the body of knowledge in whatever discipline that they function in” (PPP 10). Conversely, another participant said that research in interior design needed to be done by “somebody who lives in the trenches day in and day out (i.e., a practitioner) [because] its tough to get to the HEART of the matter” without that kind of experience (PPP 14). One participant suggested that the professional organizations should conduct research. His rationale was that while academics have the ability to conduct research, they do not have the ability to make conclusive statements; while practitioners have the front-line knowledge of important research issues, they do

not have the time or the desire to do research; and while manufacturers are in the best position, financially, to conduct research, their motivation is product-driven not environment or human oriented (PPP 11). This practitioner concluded that the only remaining group capable of undertaking research is the professional organizations.

Of the practitioners who thought that partnerships would be a beneficial way of conducting research, many thought that a partnership between academics and practitioners would be fruitful. These practitioners thought, however, that joint effort research endeavours should be “driven” by academia so that the research is objective and rigorous. Academics bring a “rigour” to the research process that practitioners “just don’t have,” and academics can help us “define and measure” some of the issues. Designers are “very visual and like to draw” and do not have the “scientific” background or interest to undertake research. (PPP 4).

Several practitioners acknowledged that partnerships between academia and practice can be problematic. Practitioners need research to occur over a short time period because they cannot afford to spend a year or two engaged in a research project. And, the term structure of academia does not allow the flexibility needed to be able to respond to the demanding schedules of practitioners (PPP 12).

The majority of practitioners thought that research in interior design should be conducted as a joint effort between all three of the main stakeholder groups. A partnership between academia, practice, and professional associations would prevent research from becoming “skewed one way or the other” (PPP 4). Practitioners are the ones who know what is needed in terms of research, academics are in the best position to do the research, and organizations are in a

*“The folks in the best position to do it [research] is government, frankly. Because they have the will, and they have the time, and they have the money. And they can be seen as providing a service, actually, to their community, and to the private sector in doing it. And, unlike many design firms who do research, the government is willing to share theirs. Because it isn’t a proprietary kind of thing” (PPP 13).*



good position to fund and disseminate research.

Two practitioners, who worked in large firms, indicated the need for research to involve individuals who have knowledge of issues outside of interior design (PPP 2, 12). One of these participants claimed that there is a need in the interior design profession for “interdisciplinary,” people who are “cross trained” and “have both languages” which enables them to understand not only design issues, but also business and management issues (PPP 12). The other practitioner said that undertaking research that demonstrates the value of design to a client would require a team consisting of “in-house and out-of-house [individuals]. In other words, service providers, designers, and clients because it has to be a meeting of the minds” (PPP 2). This participant said that it was unlikely that academics could do research on the value of design unless they understood the language of “running a corporate real estate group” (PPP 2).

#### **4.1.2.8 Disseminating Research (Question Seven)**

Practitioner participants provided a range of ideas about how best to disseminate research in the interior design profession. The most preferred methods of dissemination were magazines or journals, and the Internet. One practitioner said that information that was “in her face” got her attention more often than did information that she had to seek out on her own (PPP 4). Numerous participants mentioned that they and their colleagues often “flipped through” design and other magazines during lunch hour as a way of becoming inspired or informed about current trends. One participant said, “Web-based research will probably be, and probably already is, the premiere way of accessing information. . . . It’s the Xgens who, as soon as there’s a question, are thinking of the Web. They wouldn’t think any other way” (PPP 14). Another benefit of Web-based

dissemination is that it allows large companies to share information with offices located in other cities.

Despite the many benefits of the Internet, several practitioners suggested that access to some Web-based information was costly. These participants complained that membership fees were sometimes required to access certain databases, or that some organization charged a fee for their Web-based information (PPP 1, 5, 11).

*“In order for research to be effective, it has to be easily accessible at almost no cost” (PPP 1).*

Practitioners had mixed views about the InformeDesign Website. On the positive side, one practitioner commented that one of the “greatest attributes” of InformeDesign is that it uses plain language and highlights design considerations (PPP 5). On the negative side, another participant said that some of the abstracts on the InformeDesign Website are:

Pretty obscure, too theoretical, and too focused on some tiny little piece of information that’s, frankly, not all that interesting to practitioners or their clients. And, of course, research being research, its written in a language that is hard for designers and clients to understand. So, research almost needs to be published in one language, for academic purposes, and then translated into layman’s language for designers and clients. (PPP 13)

Other methods of dissemination mentioned were conferences, seminars, trade shows, and continuing education. One participant commented that trade shows are important because “We are human beings. We need to interact. And design work is actually about people interacting in spaces so I think we have to remember that. . . . You know, you strike up a conversation and you always learn something” (PPP 3). Others pointed out that conferences, seminars, and trade shows can be costly to

attend, and that with the amount of information available through the Internet, there is little motivation to attend such events. One practitioner suggested that the structure of some conferences, “by the nature of the audiences that they seek, appear to offer a more topical treatment of content” rather than a substantive sharing of research information. This participant believes that research should be shared “with clients or individuals in positions who can reflect on, and possibly act upon, the outcomes of the research” (PPP 12).

Practitioners were not specific when it came to identifying who should disseminate research. A few participants did describe, however, how effective manufacturers have been at disseminating information.

### **4.1.3 Perceptions About Research in Professional Organizations**

During the telephone interviews, participants from professional organizations were asked to act as representatives for their organizations. As such, these participants represented the opinions of practitioners, educators, industries, and students who belong to their respective organizations. Consequently, perceptions about research in professional organizations varied widely because of the range of individuals these participants represented.

#### **4.1.3.1 Definitions of Research (Question One)**

How individuals in professional organizations defined or described research, again, ranged from informal to formal. For instance, one participant said,

There is a great percentage of our membership, or population of our membership that regards research as, basically, information. . . . Its anything, any kind of information about the practice of interior design

that they're either getting from the usual sources, like manufacturers or corporate partners. And, it comes to them in any number of ways: through publications or through their reps.. Then there is the flip side of it that's the more traditional definition of research, the academic definition of research. (POP 4)

Formal research was described as “generating new knowledge” (POP 5); “the discovery process of gathering, testing, and defining information that advances the body of knowledge” (POP 1); and as “quantitative and qualitative research that's conducted usually by an academic or some type of research institution which is then juried by a peer group, and has gone through some kind of a review process” (POP 3).

In their own research efforts, professional organizations seemed to recognize and support formal research. This was evidenced by the organizations' use of internal experts who had training in formal research, or the hiring of external research consultants to undertake research for the organization. One participant described how research was undertaken at his organization:

Most of the studies that I sent you were done by an outside research firm. They were contracted to conduct either interviews with individuals, be they designers or clients or whoever, or to conduct telephone surveys. And then the results of those surveys, or those interviews, would be written up by a consultant, either working for the research firm, or an independently contracted consultant. And, they would write up the findings and then those findings would be reviewed internally here by staff. And they would be reviewed probably by one or two designers

*“I think it would be apt to say that research is defined as the discovery process of gathering, testing, and defining information that advances the body of knowledge” (POP 1).*

*“We do quantitative which is where the results presented as quantities or numbers or some would say statistics. Second kind we do would be qualitative where the results are presented as trends or themes and described in words. Thirdly, we do experimental where a treatment would be introduced. Fourth, we would do non-experimental where there’s no treatment -- that you simply observe subjects as they naturally exist. And some examples of those would be surveys, correlational research, historical research, and case studies. And then perhaps a final category, number five, mixed studies where they include both quantitative and some qualitative” (POP 5).*

who had been identified as having some knowledge in that area. And, usually, the way they were done was that once the report was completed then a continuing education course would be developed. And, usually, the designers who would present those courses would be the people that would be involved in helping to review the study. (POP 3)

#### **4.1.3.2 Examples of Research Conducted (Question Eight)**

Examples of research produced by professional organizations are as diverse as the organizations themselves. Nevertheless, the examples of research described here include various topics, methods, purpose, and outcomes.

Research topics were both internally and externally oriented. For example, some organizations undertook research needed to support the organization’s mandate. External research focused on topics that the various organizations believed would benefit their members. External research topics often centered on workplace design, productivity within the workplace, recruitment and retention, strategic mapping, sustainable or green design, emerging trends both in and outside of design, design practice, and linkages between design education and practice.

The methods used by organizations to conduct research ranged widely. Case studies, opinion polls, telephone surveys, and telephone interviews were mentioned frequently, as were both qualitative and quantitative research methods.

The purposes for which research was conducted in professional organizations included: (a) to gauge attitudes of “a particular population” (POP 1, 3); (b) to synthesize research and decide what should be re-conveyed to members of the organization (POP 3, 4); or (c) to develop internal, proprietary knowledge (POP 1).

The products of formal research usually took the form of research reports, white papers, journals articles, or conference proceedings. Sometimes, the results of research were also published in business magazines such as *Forbes* or *Fast Company*.

#### **4.1.3.3 Facilities and Resources for Supporting Research (Question Nine)**

Typically, research is not conducted directly by the employees of professional organizations. Instead, members of the organizations who are educators or external research consultants conduct research off site. Consequently, the facilities for supporting research are not really applicable to professional organizations. As one participant reported, “Facilities are typically on the individual campuses of the faculty member. [Our organization] does not provide any [facilities] specifically for member usage” (POP 5).

Professional organizations do provide, however, numerous resources to support research or research-related activities. For instance, all organizations employ staff who provide assistance with transcribing, mailing, or organizing conferences or meetings (POP 1, 3, 4). In addition to support staff, professional organizations provide financial resources to support research in interior design. In some cases, financial support is provided for research projects undertaken by individuals within the organization itself (POP 1, 2, 3). In other cases, financial support is provided to individuals external to the organization (POP 5). For internal projects, funding is often used to hire research or statistical consultants (POP 1, 2, 3).

Most organizations reported that, overall, facilities and resources for supporting research or research-related activities are adequate. There was, however, an overwhelming desire by all professional organization

*“I think that, for the most part, the conventional wisdom is that its [research is] used to inform projects. Its used for two things. Its used to get into a client’s door. And its used to inform projects, obviously. And then, for God’s sakes, its hard to believe but, just for the sake of knowledge itself” (POP 4).*

participants to have more consistent, long-term financial support for interior design research. One participant said, “Facilities are adequate, resources are not . . . Funding resources for this profession are extremely limited in relation to other disciplines. It’s a constant struggle to locate money to support solid research” (POP 5).

#### **4.1.3.4 Examples of Using Research (Question Two)**

Depending on the mandate and membership of each organization, research in professional organizations is used in a variety of ways. In organizations where members include practitioners, participants confirmed the finding explained earlier that practitioners use research primarily to inform design projects (POP 4, 5) and, in some cases, “to get into a client’s door” (POP 4). In organizations where members include educators, research is, again, used to inform teaching, to inform educators’ own research endeavours, and as “a model for related research” (POP 5).

Research is also used by individuals in professional organizations for the purposes of: (a) drafting policy or position papers on various issues such as professional licensure (POP 3); (b) determining education programs and continuing education courses (POP 3, 4); (c) determining strategic planning and research priorities and interests (POP 1, 3); (d) developing standards and guidelines particular to the organization (POP 1, 2); and (e) becoming aware of “information and knowledge that we think has value to our members” (POP 3, 4).

#### **4.1.3.5 Sources of Research Used (Question Three)**

Participants from professional organizations provided a limited range of research sources that they or members of their organization utilize. Nevertheless, all of the organizations relied on some form of academic, peer-reviewed research, including the InformeDesign Website

and the *Journal of Interior Design*; research from other disciplines such as education, psychology, and business; and specific documents such as Boyer and Mitgang's (1996) study about architectural education. One participant made an interesting comment suggesting that the sources of research members use depends:

. . . on the type of design that they [members] do. My experience is that people who are working in healthcare, and people that are working for the government, are much more research savvy. They really look at a lot of research before putting together a design solution for a particular type of client base. . . . More academic. You know, they're looking at the healthcare journals, looking for information on wayfinding, and how do patients in certain kinds of environments react to certain kinds of colors or patterns? You know, anything that might have an impact on the well being of the individual in that space. (POP 3)

Several participants (POP 3, 4, 5) mentioned using industry or manufacturers such as Steelcase, Haworth, and Herman Miller as sources of research. One participant commented that the type of research used by designers varies, depending on the type of work the designer does:

Some designers do quite a bit of research in terms of industry-related research. You know, looking at certain types of materials or [how] furnishings perform in a space. Some of them do a lot of turn-key kind of stuff so they're less interested in the research. Again, I'm making a distinction there between research and information because I think a lot of them are looking for information. (POP 3)

Two participants mentioned using research from,

*Research is used: "1) to inform decision-making in professional design work. Uhm, you would understand a lot of our members, while they're educators, they're also professionals as well and work on the side or have a consulting business. So, to inform their professional work; 2) to facilitate the improvement of personal pedagogical skills to help us be better teachers; 3) as an inspiration for further research; 4) as a model for related research, 5) as a teaching tool; and 6) in the classroom both at the graduate and undergraduate levels thereby improving the next generation of entry-level practitioners" (POP 5).*



and attending conferences sponsored by, professional organizations outside of interior design (e.g., the Illuminating Engineering Society of North America [IES], and the Environmental Design Research Association [EDRA]).

Participants from professional organizations did not mention using the Internet, past experience, or past projects as sources of research although it is likely that members of each organization do, in fact, use such sources. Like some practitioner participants, at least one professional organization participant mentioned marketing research. “We also look at marketing research and public opinion poll research that might be done by others that might have indications for us about what our members should be doing” (POP 3).

#### **4.1.3.6 Research Needed (Question Five)**

In professional organizations, research needed in interior design is, again, described in terms of topics and methods. Research on specific typologies, and the purpose or motivation for research were not mentioned by professional organization participants.

Overall, the topics on which research is needed were quite diverse, even though there were only five participants representing this professional organization context. Likely, the wide range of topics is indicative of the fact that the professional organizations represent a large number of educators, practitioners, and industry representatives.

Two participants reaffirmed what practitioners had expressed as a key research need: the value of design (POP 3, 4). One of these individuals remarked:

One of the things that I’ve heard from our commercial designers, almost since the day I walked in the door here, is, “We want to develop some standardized measurements that we can take

to clients that talk about, you know, here's how to measure the impact of the design on your business." Whether its on profitability or productivity or worker retention or worker recruitment or, you know, you've saved X number of sick days a year by having a more positive environment for people to work in or whatever it is. (POP 3)

The same participant also mentioned the need for statistics on interior design firms. He said:

One of the things that we get a lot of requests for, and that we have not, at this point, been able to find much information on is "What are designers actually doing out there on a day-to-day basis?" How do they spend their time? What kinds of projects are they working on? What is their average revenue stream? How many employees do they have in their businesses? What those employees do? How profitable are their businesses? What kinds of trends are they seeing in terms of demands from their clients? Those kinds of things. . . . There's not a lot of good systematic collection of that kind of data for interior design. . . . Part of the reason is that there's not a clear definition of what an interior designer is in the United States, at least from a Legislative or regulatory standpoint. So, trying to capture data is somewhat difficult because you're not quite sure, you know, is the person I'm talking to an interior designer? Is the person I'm talking to an interior decorator? Is the person I'm talking to a store planner? I mean, what is it that they actually do? (POP 3)

Other topics mentioned in interviews with professional organization participants included POEs,

*"There still does not seem to be that one salient, quotable, bit of research or study that absolutely defines the value of interior design. Because, CONSTANTLY, if there's any, you know, big whine in the profession is that my members -- particularly on the corporate side -- have difficulty demonstrating the correlation between design and value to the bottom line. . . . But no one has that one kind of landmark study that says this is why interior design is indispensable to the corporate community. . . . So, if you could TELL them or demonstrate that, you know, a specific design solution will increase their productivity by 27% and help them retain 45% of their employees, then you've got something" (POP 4).*

*“I think more research is really called for, and of course, you know, the validity and the reliability of research really bases itself on replication. And I think in design-based research we don't do nearly enough of replication and extension studies” (POP 1).*

statistics on educational programs in interior design, future trends, sustainability, and competency-based standards for practice.

In terms of methods for research needed, comments were made by participants about the need for valid and reliable studies that build on previous research (POP 1). Participants also mentioned the need for statistical, “hard” data. According to one participant, the public, Chief Executive Officers (CEOs), and Chief Financial Officers (CFOs) do not understand or accept qualitative research. They want facts and figures, and “metrics that make sense to a CFO” (POP 4).

#### **4.1.3.7 Sources of Research Needed (Question Six)**

Consistent with educator and practitioner participants, professional organization participants expressed a variety of opinions about who or what organization is in the best position to conduct the research needed in interior design. Two participants thought that academics have the most important role to play (POP 1, 5). One individual commented that, “The easy answer is that it should be interior design educators” (POP 5). This participant, and one other, also suggested that practitioners have important roles to play in conducting research (POP 1, 5). One participant said that professional organizations already play an important role in supporting research by providing funding, or by securing funding from industry or practice for research in interior design (POP 1, 5).

Also consistent with other participants in the study, were professional organization participants' beliefs that a joint effort between various stakeholders would be the best way to produce research in interior design. One participant discussed the desire to “really develop some ongoing partnerships with some of the professional organizations

or within industry [to promote] more sustained research efforts” (POP 1). Another participant thought that there should be “SOME kind of body or CONSORTIUM that’s an amalgam of design firms and interior design educators who are doing it [research] together” (POP 4). According to this participant, a partnership between practitioners and academics would help to avoid the subjectivity that seems to be present in some manufacturers’ research.

Two participants mentioned interdisciplinary research. One organization believes that there is value in interior design researchers “coming together” with other disciplines, such as engineering, “some of the social sciences,” or the “medical profession” to conduct interdisciplinary research (POP 1). Another organization believes that there needs to be opportunities for interior designers to work with individuals in other disciplines to “improve the quality and validity” of research studies in interior design (POP 5).

#### **4.1.3.8 Disseminating Research (Question Seven)**

Some professional organization participants thought that the best way to disseminate research was through print sources such as the *Journal of Interior Design* (POP 1, 5). Other participants thought that publications from summits, industry roundtables, and conference proceedings (POP 4, POP 5) were a useful way to disseminate research. Printed information is needed “BECAUSE designers are visual and tactile, and . . . There’s something very reassuring about having research enclosed between two hard covers” (POP 4).

The Internet was also considered to be an important tool for disseminating research (POP 3, 4), as was the *e-JID* (POP 5). One participant commented that an online knowledge centre was needed that could function as a

“systematic, orderly way of organizing and disseminating design research” (POP 4). This participant said that such a resource should not compete with the InformedDesign Website, but should complement it.

For professional organization participants, conferences, seminars, and trade shows were considered to be an important means of disseminating research (POP 3, 4, 5). According to one participant, these events are a great addition to the Web and to printed research because, “inherently, research is DONE by people and its ABOUT people and its about things that affect people” (POP 4). One participant said that, although conferences are an excellent source for finding out about the most recent research, they are too costly to attend “from a knowledge gathering stand point” (POP 3).

In terms of who should disseminate research in interior design, all of the professional organization participants suggested that professional organizations rather than academia, practice, industry, government, or other sources should be responsible for distributing knowledge to stakeholders. One participant noted how communication among the organizations has been poor, and that the organizations, as a collective, could do a better job of coordinating the dissemination of research and information (POP 4). Two participants said that limited resources for non-profit organizations makes it difficult to disseminate information in an economically feasible fashion (POP 1, 4).

#### **4.1.4 Summary of Participants' Perceptions About Research**

##### **4.1.4.1 Definitions of Research (Question One)**

In the context of education, perceptions about research range from informal to formal. Educators

believe that research can be either a formal endeavour or an investigation undertaken as creative scholarship. Undergraduate students understand research as project-related information gathering. Graduate students understand research in ways similar to educators.

In practice, research is understood as being project-driven although there is recognition that a more formal type of research exists. In both education and practice, the educational background of an individual seems to determine how that individual understands or defines research. Those individuals trained in research methods understand what formal research is; however, those without a research methods background have the least understanding and appreciation for formal research.

Since professional organizations consist of both educators and practitioners, research in professional organizations is understood as being either informal, project-driven, or formal.

#### **4.1.4.2 Examples of Research Conducted (Question Eight)**

Faculty conduct both basic and applied research on a variety of topics ranging from educational to design issues. Some educators also undertake creative scholarship as a form of research. Educators use a wide range of research methods, including qualitative, quantitative, and mixed methods. Typically, educators publish their research in peer-reviewed journals or in books, or they present their findings at conferences. Undergraduate students conduct informal investigations for project or assignment purposes. Graduate students utilize formal research methods as a process for completing practicums or theses.

Research undertaken by practitioners most often focuses on clients, end users, products, materials, or building code issues. Practitioners tend to utilize

questionnaires, interviews, and literature reviews as the primary means of data collection. Typically, practitioners undertake research for project-specific purposes or for the development of internal processes and procedures. Research by practitioners commonly results in standardized documents and databases that are mostly for internal use. Although practitioners claim that the majority of research is done for project-specific reasons, in actuality, many firms invest a fair amount of non-billable time in developing research-based internal procedures, monitoring current trends, and developing research-based marketing strategies.

Research conducted by professional organizations focuses on current and emerging trends, marketing, and issues related to each organizations' particular mandate. In addition, because members of professional organizations include both educators and practitioners, research done by individual members of organizations ranges from formal to project-specific.

#### **4.1.4.3 Facilities and Resources for Supporting Research (Question Nine)**

In education, practice, and professional organizations, the lack of time and consistent, long-term funding prohibit sustained research. Educators, however, do have opportunities to undertake research projects when on sabbatical.

#### **4.1.4.4 Examples of Using Research (Question Two)**

In education, research is used by educators for teaching, program planning, and for informing their own research. Undergraduate and graduate students use research to support course or studio work. Graduate students, specifically, use research to inform their own practicum or thesis projects.

In practice, research is used mostly to inform projects, but also to secure clients, amass benchmarking data, and develop internal policies and procedures.

In professional organizations, research is used to support organizational mandates, develop educational programs, and to raise awareness about trends both inside and outside of interior design.

#### **4.1.4.5 Sources of Research Used (Question Three)**

Educators use academic research sources both inside and outside of interior design. Undergraduate students tend to use non-academic sources from the Internet and from within interior design. Graduate students use research sources similar to educators.

Practitioners rely on industry representatives, outside consultants, the Internet, in-house expertise, and past projects as sources of knowledge.

Professional organizations utilize a full range of academic and non-academic sources from a variety of individuals and organizations.

#### **4.1.4.6 Research Needed (Question Five)**

Educators suggest that research is needed on: (a) design practice, (b) design processes and the value of design, and (c) spatial typologies. In terms of research methods, most participants agree that both basic and applied research is needed. Educators would also value POEs done by practitioners.

Practitioners believe, overwhelmingly, that research is needed to demonstrate the value of design to clients. Numerous practitioners also believe that there is a need for objective research on sustainability, products, and technical information. These individuals suggest that research on these topics should be assembled into comprehensive Internet databases similar to InformeDesign. Although



practitioners believe that both qualitative and quantitative research is needed, they seem to prefer quantitative data. Quantitative data, in the form of statistics, is preferable for practitioners because it appeals to clients, and because it is easy for practitioners to access and understand.

Professional organization participants believe that many types of research are needed in the profession. The range of research needed is indicative of the fact that the professional organizations represent diverse populations including educators, practitioners, and industry representatives. As a whole, professional organizations believe that research is needed on the value of design, current and future trends, and on interior design firms and educational programs. Professional organizations believe that valid and reliable studies are needed, and that new research should build on previous research. Finally, professional organization participants believe that statistical, “hard” data is required to demonstrate the value of design to clients and other external stakeholders.

#### **4.1.4.7 Sources of Research Needed (Question Six)**

Although it is not unanimous, most educator, practitioner, and professional organization participants believe that research in interior design needs to be undertaken as a joint effort between education and practice. Participants agree that educators (and graduate students) have the academic skills and desire to conduct research, while practitioners have important links to clients and end users. Many participants, including some practitioners themselves, believe that practitioners have not played a significant role in terms of promoting research in interior design. Participants in all three contexts also believe that professional organizations have a significant role to play in funding such research, disseminating research, and possibly

in overseeing or coordinating collaborative research efforts between educators and practitioners.

#### **4.1.4.8 Disseminating Research (Question Seven)**

Educator, practitioner and professional organization participants agree that there is a need to disseminate research in both print and Internet formats. Educators and members of professional organizations also value conferences and symposia as a means of disseminating research, even though funding to attend conferences is often limited or non-existent. Although educators are eager to publish and disseminate their research, they believe that practitioners also need to take responsibility for disseminating practice knowledge.

Although practitioners have mixed views about the usefulness of the InformeDesign Website, numerous practitioners believe that the need exists for similar databases. These databases could have information on such topics as hard-to-find products, technical issues, and sustainability. For practitioners, fast, cost-efficient access to information is important.

Professional organizations are enthusiastic about disseminating research, although some participants admit that the organizations could be working more cohesively towards this goal.

## **4.2 RESEARCH IN INTERIOR DESIGN: A SYNOPTIC OF THEMES**

The themes presented in this portion of the chapter are an amalgamation of ideas that emerged from: (a) the literature, (b) participants' perceptions about research, (c) additional themes from the data, and (d) the theoretical memos made throughout the data collection and analysis

*“When we have a project opportunity come up in practice . . . it needs to be done often in a week, maybe two. And we have conversations with academics who want to partner and the difficulty there is . . . in a recent conversation there was a group at [inaudible] who said, ‘Well, we want to do this, we want to do that.’ We said, ‘That’s great. This is our time frame. This is what our client expects.’ And they said, ‘Well, no. We have students and they have other classes, and we can’t.’ And, the unfortunate part, sitting on this side of the fence, is that it always comes off as if, ‘Oh, your corporate value system keeps you from really doing what you should be doing.’ And there’s no reciprocity to say, ‘Well, you know, your academic schedule isn’t real to the rest of the world that works in this kind of time frame because that time you’re asking me for has a dollar value on it.’ . . . So I think that that’s one of the challenges that we always have -- the desire to participate more holistically with a true research-based entity, but the limited capability to invest excessive time because of the market place demands for a design practice” (PPP 12).*

processes. Amalgamating these sources was necessary for obtaining a comprehensive overview of the most important issues concerning research in interior design.

In order to identify similarities between the literature, data, and theoretical memos, critical ideas from each source were listed and compared. What resulted was the list of eight inter-related themes shown in Figure 7 (p. 157). This part of the chapter describes each theme, and the potential implications that each theme could have for the Theoretical Framework for Research in Interior Design.

#### **4.2.1 Theme 1 – Resources for Conducting Research**

1. There is a lack of consistent, long-term funding from government, industry, professional organizations, clients, practitioners, and universities for research in interior design. Research funding has not been available in interior design because of the dominant perceptions that interior design is not valued, it is not recognized as an essential service, it does not focus on relevant research topics, and it “falls between the cracks,” in that it is not art, science, or social science, under traditional definitions applied by funding organizations” (HRDC, 1996, p. 64).

The lack of funding for research prevents educators from being able to get release time, and from being able to disseminate research through conference presentations. The unwillingness of clients to pay for research services, in part, prevents practitioners from engaging in research projects.

2. There is a lack of time for conducting research. For educators, the lack of time is due to heavy teaching and service loads. For practitioners, the lack of time is due to ever-present budget constraints and strict project deadlines.

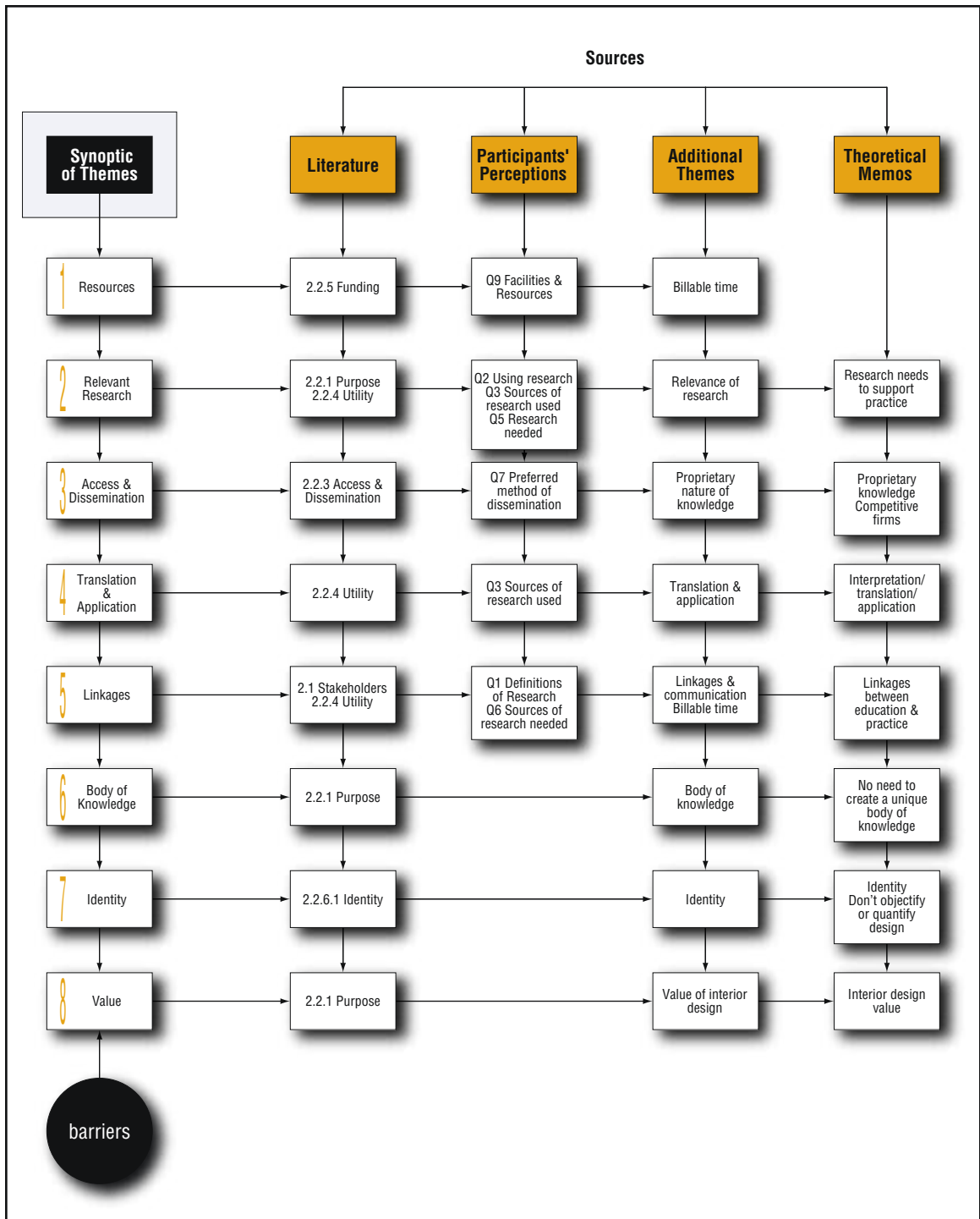


Figure 7 – Research in Interior Design: A Synoptic of Themes

*“When we can get designers to actually look at articles, its difficult for them to make safe generalizations because often what is studied are such small sample sets, that they’re subject to easy challenge. Its hard to get enough momentum on an idea, or on a space type, or user type, or building type for it to be really impactful on either the designer or, ultimately, the client as providing support to design decisions.*

*For example, there may be a very impactful, very interesting, and very well-written study about 12 people in a basement space in Denver. Or, a study on student density, but it happens to be eight students in Mexico city. These are very specific studies that are difficult for us to utilize in other applications” (PPP 5).*

#### 4.2.1.1 Possible Implications

1. The lack of resources for conducting interior design research can be overcome, or improved, by conducting research that is more relevant to practitioners, clients, and end users than it has been to date. In other words, stakeholders may be more willing to fund research if they consider the research to be relevant.

2 By developing an appreciation for research and by taking responsibility for convincing clients that research is valuable and necessary, practitioners may be able to generate more funding for research and, at the same time, be able to invoice clients for research time.

#### 4.2.2 Theme 2 – Relevant Research

1. To date, the research agenda in interior design has been influenced by academics, and for the most part, has not resulted in research that practitioners consider to be relevant. Generally, educators’ preferences for research topics, methods, and means of dissemination are motivated by tenure and promotion criteria; their need for research that can inform their own teaching; and their desire to contribute to the profession’s knowledge base. In addition, educators operate within a formal research culture. They meet the expectations of that culture by undertaking research in ways that are recognized by others who belong to the same culture.

These factors have resulted in research that tends to be more theoretical than practical, and that serves the profession’s need for a theoretical body of knowledge rather than external stakeholders’ needs for relevant research, or practitioners’ needs for applied research.

2. Practitioners do not value the research done by academics because: (a) the topics do not relate to the

everyday problems faced by designers or their clients, (b) few studies exist which practitioners can use to demonstrate to clients the value of design, (c) formal research is difficult to understand because it is “too theoretical” or “too obscure” (PPP 13), (d) the research methods used by researchers result in findings that are either too narrow or too broad, and (e) research findings are usually disseminated in journals that few practitioners have access to or find interesting.

#### 4.2.2.1 Possible Implications

1. Research is needed in interior design for a variety of reasons: (a) to inform teaching, (b) to inform projects, (c) to develop or streamline design processes, (d) to develop education and certification standards, (e) to understand issues outside the discipline, and (f) to demonstrate the value of design to clients, end users, and society. Considering the range of purposes for which research is needed, both basic (theoretical) and applied (practical) research need to be undertaken by interior design researchers.

2. Practitioners may need to take greater responsibility for informing researchers about topics that would be of interest to, and valued by, practitioners .

*[If interior design educators do not start to do research that is relevant to practice, then] “one of two things is going to happen. And one of them is already happening. One of them is that manufacturers will take over that role and use their resources for R & D to do that kind of research. And they publish it and its nicely packaged and its easy to read and the information's there, and more and more designers are going there. And the other thing that will happen if academia doesn't find a way to do it is that the associations will eventually hear their members, and they will take on a form of research that's more pragmatic. And then where will academia be?” (PPP 13)*

#### 4.2.3 Theme 3 – Access to and Dissemination of Research

1. There is a lack of comprehensive, valid, objective, low-cost, accessible databases where researchers, practitioners, students, and related industries can disseminate and access research quickly. The InformeDesign Website is one of the few such resources available.

*“A lot of firms are doing research. They’re just not willing to share it with anybody. . . . Everybody says their stuff is proprietary, and you know what? That just frustrates me to death. Because we’re all always re-inventing the wheel. I mean if somebody finds out that this is something that works really well, [then] they need to be able to share that so everybody can create good spaces. If somebody finds something that doesn’t work well, then, by golly, they need to be willing to share that too” (EIP 4).*

*“It really is, I think, a misperception that all these practitioners have these fabulous research resources secretly working down in the basement, and that we don’t want to share that with anybody. . . . I agree that there’s OPPORTUNITY for a lot of information capture, but it’s not currently being captured in just about any firm. And whatever capture there is, and whatever research done, and whatever white papers are written and published, are primarily -- and I hate to say this -- but not for the betterment of the profession. It is done to position the firm as a ‘SMART’ firm in pursuit of new customers, so they perceive this firm as being a leading firm, thought leader, and to differentiate in the market place” (PPP 11).*

2. While educators and students have access to a wide variety of research and databases, such access is possible only because of their affiliation with university libraries. Practitioners tend to have limited access to research and large databases because of the high cost of membership.

3. Practitioners’ needs for quick access to information determines which sources they are most likely to use. Consequently, practitioners tend to seek project-specific information and rely on in-house and outside experts and consultants, past projects, and their own experience as sources of information. These sources are supplemented by information from the Internet and industry manufacturers.

4. Educators disseminate the largest amount of research because dissemination is an expectation for tenure and promotion. Practitioners, on the other hand, have a wealth of information to share, but spend little time documenting or disseminating it.

Reasons why practitioners are reluctant to capture and disseminate information include: (a) a lack of time, (b) the need to focus on obtaining clients rather than on building the profession’s knowledge base, (c) the competitive nature of business, and (d) the concern for protecting proprietary knowledge. The research or knowledge that practitioners do, in fact, disseminate tends to be market-driven in that it is often aimed towards demonstrating a firm’s expertise to clients.

5. Opportunities for disseminating research in interior design are limited. Currently, only the *Journal of Interior Design* and the *e-JID* are dedicated exclusively to interior design research. Although interior design researchers can (and do) publish in journals in other

disciplines, the lack of profession-specific journals may account for the low levels of research dissemination within the profession.

#### **4.2.3.1 Possible Implications**

1. Opportunities for increased access to, and dissemination of, research need to be made available. Practitioners could assume responsibility for documenting and disseminating lessons learned in practice. Case studies and POEs, for example, are two types of knowledge that practitioners could contribute to the profession's knowledge base. Educators and graduate students could assist practitioners in documenting case studies and POEs. Graduate students could also disseminate the results of their creative projects, practicums, and theses.

Professional organizations could work together to coordinate the dissemination of research, and could utilize trade magazines and continuing education courses as vehicles for dissemination. Websites similar to InformeDesign could be developed for research-based and general information on products, technical and business issues, and other issues such as sustainability.

*“The leading obstacles to accessing the information lie in understanding how to interpret and translate the research findings into design applications”  
(IIDA, 2003, p. 1).*

#### **4.2.4 Theme 4 – Translation and Application of Research**

1. Like researchers in other disciplines, researchers in interior design use the vocabulary and methods of formal research to describe their research studies. For individuals not educated in, or familiar with, formal research, such studies are difficult to understand.

2. Many stakeholders in interior design acknowledge the need for formal research to be translated into a language that can be understood by individuals not trained in formal research methods (EIP 1; IIDA, 2003; PPP



*“Participants agreed about the need for encouraging the research community to translate their findings into forms that practitioners find readable” (IIDA, 1998a, para. 7).*

*“Practitioners need specific information that is conclusive -- do this, don't do that. Researchers and academics, however, are almost completely resistant to ever saying or writing a sentence like that. So, those two worlds don't even pass by each other” (PPP 11).*

13; Szenasy & Johnson, 2000; Zube, 1980). Presently, however, practitioners report that they do not have either the skills or the motivation to translate research into practical knowledge. Researchers, as well, seem equally resistant to translating research findings into a more easily understood language.

3. Designers tend to use research, knowledge, and information that has been filtered, translated, distilled, or generalized to a point where it is easy to understand and use. Rather than using formal research to inform design projects or design decisions, practitioners tend to rely on: (a) industry or manufacturers' literature, (b) technical experts or consultants, (c) benchmarking summaries, (d) internal sources including co-workers or colleagues, (e) past projects or past experiences, and (f) magazines. These sources provide designers with easy-to-understand, “bottom line” information that can be understood and applied quickly.

Undergraduate students use a similar, but more restricted, set of sources for design information. In particular, undergraduate students tend to rely on trade magazines and the Internet because these sources are convenient and easy to understand.

#### **4.2.4.1 Possible Implications**

1. Clearly, there is a need for a designated party to translate formal research into a language that designers can understand and access quickly. If research cannot be understood or used by designers, then there is little chance that design decisions and design solutions will ever become evidence-based.

### 4.2.5 Theme 5 – Linkages

1. Factors that impede effective collaboration between interior design stakeholders, particularly between educators and practitioners, include: (a) a general lack of time, (b) different time frames in practice and education (i.e., academic term structures versus practice schedules), (c) disagreement about topics that constitute relevant research, (d) the inability for researchers and practitioners to understand each others' languages and priorities, (e) the proprietary nature of project-based knowledge and research, (f) poor past experiences with collaborative projects, and (g) a lack of motivation by firms with in-house research units.

#### 4.2.5.1 Possible Implications

1. Educators, students, researchers, and practitioners need to be more aware of the issues, pressures, priorities, and needs of one another. Educators and researchers need to understand more about business, real estate, and other issues that designers face on a day-to-day basis. Conversely, practitioners need to understand and respect the contribution that researchers make to the profession's theoretical knowledge base.

2. Effective collaboration and better linkages between stakeholders may be possible if all stakeholders were committed to developing a theoretical and practical body of knowledge. Better linkages between stakeholders may also be possible through the development of a strategy for translating design priorities into research objectives, and for translating research findings into a language that designers can understand.

*“There’s always this cry from the practitioners saying, ‘We need more research. We need more research. We need to have information we can give our clients that proves the value of design,’ and blah, blah, blah, and, give them hard facts. And then, on the other side of the fence, you have the academics who are saying, ‘There’s lots of research. There’s piles of . . . We’ve got LOADS of research.’ But, somehow, the two are not hearing each other. And, there’s fault I’m sure on both sides. . . . I’ve also sat in meetings where practitioners will say, ‘Well, here’s the kind of research that we need.’ And educators will say, ‘Well, that’s not research.’ And so there’s the end of that conversation” (PPP 13).*

### 4.2.6 Theme 6 – Body of Knowledge

1. Literature suggests that a distinct body of knowledge is one of the defining characteristics of a discipline and, as such, could elevate interior design to the status of a discipline. A distinct, comprehensive, and substantial body of knowledge could also help the interior design profession gain respect and recognition from related disciplines, university administrators, governments, and society. Furthermore, a unique body of knowledge is required for Practice Act Legislation. Despite these benefits, in both the literature and the data, there were mixed views about whether a distinct body of knowledge is desirable or even possible (EIP 1, 11; Frankel, 1998b; Hildebrandt, 2003; PPP 12; Sutton, 1992).

*“From [our organization’s] perspective, we absolutely support that there is a separate and distinct, uhm, body of knowledge . . . There’s also the acknowledgment, though, that it overlaps significantly into architecture. And that overlapping area is what we say is health, safety and welfare. . . . there is just this firmly held belief that design affects and impacts human behaviour. And, you know, the other disciplines aren’t as much grounded in human behaviour as interior design” (POP 4).*

#### 4.2.6.1 Possible Implications

1. From a research point of view, whether or not there is, or ought to be, a distinct body of knowledge is important. A distinct body of knowledge could provide researchers with information about the kinds of topics that need investigation. If a distinct body of knowledge is not required or possible, however, then it may suggest that researchers need to focus more on translating research from other areas rather than on generating original research.

*“I don’t know if the knowledge is unique, but I think that how we apply that knowledge is special to our profession. I think that some of the principles that we use are known by other designers, other disciplines -- architecture and graphics and related disciplines. I just think our perspective is different because of the point of view of the individual sitting in a space and what’s surrounding them versus looking at it from the outside of the building as a piece of sculpture. So I don’t know if our body of knowledge is unique but I think the way we look at things is. There’s a way we look at thing that reflects kind of the scale and the surroundings that we have” (PPP 4).*

### 4.2.7 Theme 7 – Identity

1. Internal stakeholders believe that interior design is, or ought to be, either an art-based profession, a science-based profession, or both an art- and a science-based profession. Other internal stakeholders do not believe that interior design’s identity ought to have boundaries or limitations.

External stakeholders often perceive interior design as “fluff” (EIP 4); or as “arbitrary decision-making based on

intuition, talent, and slushy, soft, indefinable words such as ‘creativity’” (Drab & Thompson, 2000, p. 46). Frequently, individuals outside the profession confuse interior design with interior decoration.

Differences of opinion about interior design’s identity causes confusion for clients, end users, and interior designers themselves (Cohen, 2000). More importantly, these differences of opinion have resulted in a lack of commitment to research in interior design because not all stakeholders agree that research is a valuable pursuit.

2. Interior design is a profession that is struggling to define itself and to earn recognition from external stakeholders. Educators want the profession to be research-based because, in part, it helps justify their existence. More importantly, however, educators understand how research can help the profession establish legitimacy.

Some practitioners want the profession to be knowledge-based, because knowledge-based solutions would assure clients that design solutions are legitimate and valid. Other practitioners want the profession to be aesthetically or creative-based because they are most interested in the creative side of the profession.

Clients want the profession to be both art and research-based so that they can justify the expense of having well-designed interior environments. Industries want the profession to be product-based so that they can sell more products.

Clearly, there is no consensus, either internally or externally, as to what the profession’s identity is or ought to be. At the same time, different stakeholders have strong and valid reasons for advocating their positions.

3. The nature of interior design practice is changing. Currently, there is a need for designers to

*“Well, I’ve yet to see anything of this elusive new theory that is “quintessential” to interior design. I see an awful lot of borrowed theory. But I have never seen anything that was original to interior design. . . . Why do we need our own [body of knowledge]? We are not a profession that is singular. We are always part of a team. . . . And that’s the richness of our profession. . . . I think we should be taking all of these different things and synthesizing it into what makes sense for people who practice interior design” (EIP 1).*

*“Designers are often perceived as artists but are often unable to predict accurately for clients/users the range of consequences of certain design decisions. Although the artist role will always be necessary, professional confidence can be enhanced by accurate prediction of client/user behaviour, satisfaction, and pleasure in designed spaces” (Hasell, 1993, p. 1).*

*“There’s a [perception that] interior design is a luxury rather than a necessity. Its not like having to go to a doctor. I mean, you’re not going die if you don’t hire an interior designer to design your space” (CSP 11).*

*“The other thing I’ll tell you about our profession is that -- and this is a weakness -- is that there is still no distinction between the people who have their four year degree and do work like we do and the people who are throwing cushions. And that’s a problem” (PPP 3).*

*“I truly believe [that] we’re not ever going get to the status that we want as a profession until we really start developing a strong research base. We need to get beyond the fluff and the aesthetics that we’re perceived as solely focusing on” (EIP 4).*

act as business consultants rather than solely as design consultants (Bernardi, 2001; CSP 1; EIP 3). Participants in this study confirmed that such consulting services are now being offered at some interior design firms (EIP 11; PPP 2, 5, 8, 11, 12).

Providing consultancy services requires knowledge of a wider range of topics (e.g., real estate, facility management, human resources management) than those traditionally taught in interior design programs. Experts who are capable of providing these kinds of services are often cross-trained “interdisciplinary” (PPP 12) who have been educated in other disciplines, such as management or psychology.

#### **4.2.7.1 Possible Implications**

1. Despite the potential benefits of a common identity, a range of identities may actually be necessary. An art-based identity is important because it provides the central foundation for what designers do: design. A science-based identity is important because it will lead to something the profession needs: recognition as an evidence-based profession. Finally, a service industry or business identity is important because it focuses on the underlying purpose of interior design: meeting the needs of clients and end users. Perhaps a balance can be struck between these identities.

2. Education programs may need to include interdisciplinary courses within their curricula in order to provide students with a wider range of business, research, and other skills.

#### **4.2.8 Theme 8 – Value**

1. Research that demonstrates the economic value of design and that contributes to research-based

design solutions will help convince external stakeholders of the value of the profession. Research that helps designers streamline their processes, enables them to act as knowledgeable business consultants, or adds to the body of knowledge will convince both internal and external stakeholders of the importance of research and, ultimately, will help the profession gain the recognition it seeks.

#### 4.2.8.1 Possible Implications

1. The generation or existence of “more” research in interior design may not necessarily lead to increased value for the profession. What is needed is a strategy to ensure that the research generated can actually be applied to design solutions, or constructively utilized by designers. Knowledge or research is an intangible thing in and of itself. To make it valuable, knowledge needs to become tangible through application.

2. It may be possible that research is not the answer to interior designers’ quests for increased value. Design is an activity or process in which unique, context-specific solutions are created to meet the specific needs of clients who commission the work and the end users who will use the spaces created. It therefore follows that the value of interior design may not be demonstrable by research that attempts to generalize findings to large audiences or situations. The value of design may well be in the uniqueness of the solution created for each particular situation. Given this proposition, in order to increase external stakeholders’ perceptions about the value of design, interior designers may need to explain to clients and end users how custom design solutions are the key benefit and value of design.

Collectively, the eight themes described in this section provide insight as to why a research culture has

*“As an industry, we’ve done a pathetic job of kind of building a case for ourselves. And I think that we all know, kind of intuitively, that what we do dramatically changes peoples’ businesses, improves their life, so on and so forth. But we have no way of quantifying that as of yet. And I think if research and some of these other things can help us, as a community or as an industry, kind of build our case, [then] it would be incredibly valuable” (PPP 6).*

*“Here’s the bottom line. If we can create a body of research or documentation or something that does prove the value proposition for design, then it’s going to help educators as well. Because as the design profession grows, there will be an increased demand for design education, and better quality design education. So, I mean it will help, everybody” (PPP 13).*

been difficult to establish within the profession, or why the research culture that exists is so under-developed. This awareness proved to be a critical first step in being able to create the Theoretical Framework for Research in Interior Design explained in the next chapter.

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## Chapter Five

# A Theoretical Framework for Research in Interior Design



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The first part of this chapter describes the rationale, goals, and components of the Theoretical Framework for Research in Interior Design. The rationale is particularly important because it provides details about the process through which the Theoretical Framework emerged. The goals are important because they identify the specific objectives for the Framework. The components are important because they describe the content of the Theoretical Framework. The latter part of the chapter describes implications of the Framework for post-secondary interior design education programs in Canada and the United States. Concluding the chapter is a brief summary of the overall linkages between the interior design discipline's goals, the Framework, and education.

### 5.1 INITIAL THEORIES

Prior to explaining the rationale, goals, and components of the Theoretical Framework, it is important to provide an overview of theories that emerged early in the data analysis phase. These initial theories are important in terms of the concept of triangulation explained in Chapter Three particularly because theoretical triangulation is a



way of establishing credibility in qualitative research. By understanding the initial themes and why they were rejected, the final results are more likely to be considered credible.

Initially, one idea seemed especially significant: the possibility of interior design being considered as a legitimate research paradigm equal in status to the well-established quantitative and qualitative research paradigms that exist in other disciplines. This concept centered on the belief that interior design may be a legitimate form of research, and that interior designers just need to convince others of its legitimacy. Even though it was one of my assumptions at the beginning of the study, and some of the literature and theoretical memos supported the idea that design can be considered to be a valid form of research, the data did not support such a finding. Further, because some literature suggested that there were several weaknesses with the idea of design as a form of research (Section 2.2.2, pp. 39-45), this line of reasoning was eventually abandoned.

A second theory considered early in the analysis phase was that design is, already, an evidence-based profession, but that stakeholders simply do not recognize it as such. The problem with this theory was that the research that designers use, and that enables design to be considered evidence-based, is that which has been transformed, filtered, or generalized to the point where it is actually secondary knowledge rather than primary research. As such, a claim that interior design is a research-based profession would probably not be taken seriously by many stakeholders.

To establish a bona fide research-based profession that would be taken seriously by university administrators, researchers in other disciplines, governments, and other stakeholders, the research base of interior design needs to grow beyond reliance on secondary information. Overall,

this theory fell short of what was needed in order for interior design to become valued and recognized as a research-based profession.

A third initial theory ultimately foundered because it was considered to be overly biased toward practice. This theory focused on the idea that interior design is a service industry, first and foremost, and that, as such, research in interior design needs to focus on practical or applied research. Such research would help practitioners demonstrate the value of design to clients and would help designers solve practical design problems. This theory was heavily influenced by my conversations with practitioners who suggested that researchers have not provided them with the sorts of evidence they need in order to convince clients that design is valuable and that design is not based solely on designers' intuitions or aesthetic preferences.

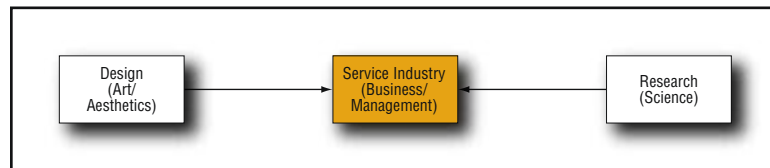
The theory was similar to the "ultimate goal" for interior design proposed by participants at an International Interior Design Association (IIDA) (2003) roundtable (Figure 8). However, rather than considering *research* to be the bridge that would connect the art and science facets of the profession, I considered *business* to be the bridge that would connect the two extreme facets (Figure 9, p. 172). If

*"At the end of the day, you are running a business . . . . If design overshadows management, then you are not going to be profitable. On the other hand, if management overshadows design, then you will not be providing a high-quality design product. Balance is critical" (Dina Frank as cited in Calmenson, 2004, p. 27).*



**Figure 8 – IIDA's "Ultimate Goal" for Interior Design**  
(IIDA, 2003, p. 6)

this initial theory had been pursued, then the central argument made in terms of a Theoretical Framework for Research in Interior Design would have been that more applied research is needed to support interior design practice. Without practice, I would have argued, there would be no interior design profession, no need for interior design education, and no need for research of any kind.

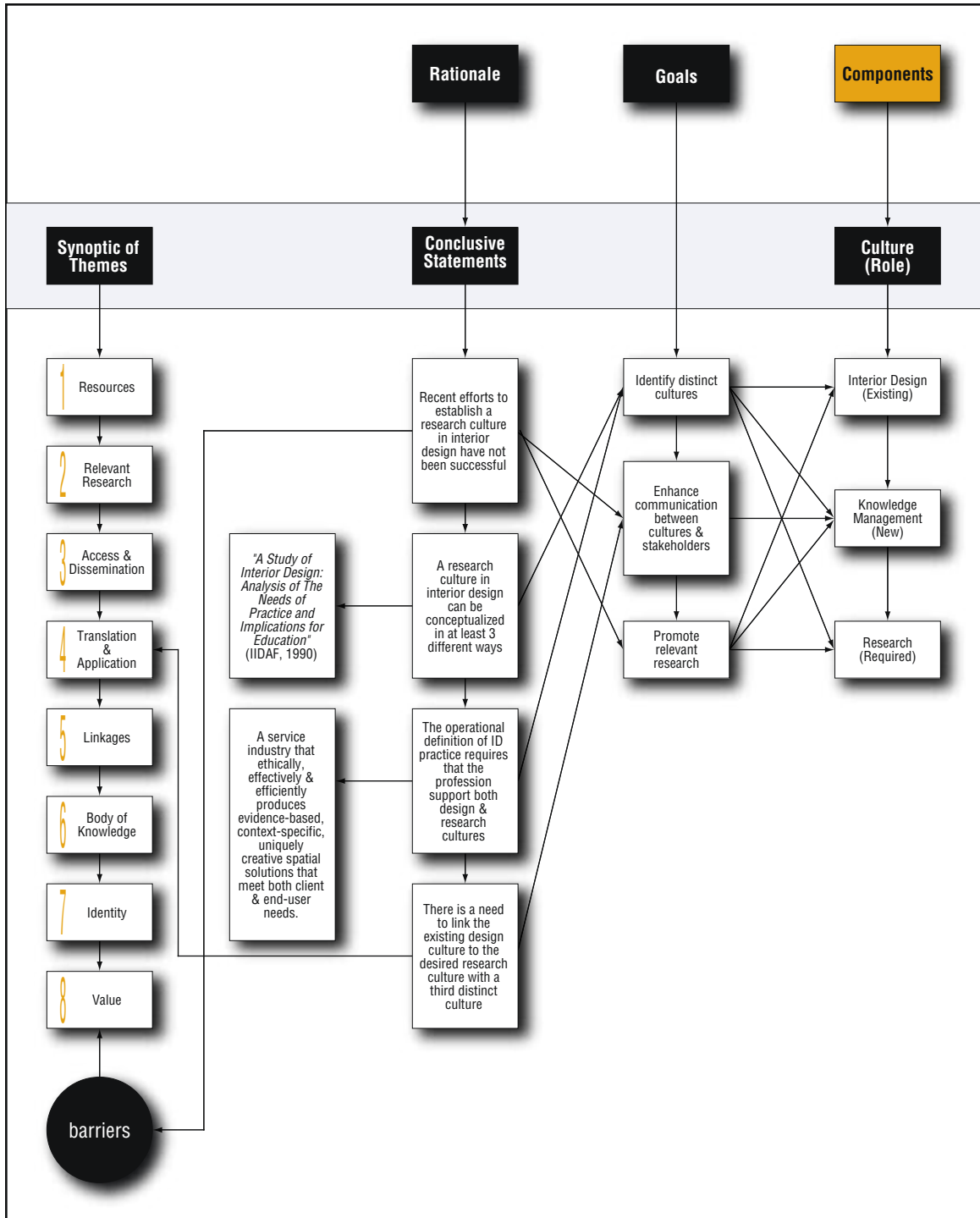


**Figure 9 – Initial Theory 3**

While the logic behind this theory may have merit, overall, the rationale was too heavily influenced by the needs of practice rather than the needs of the profession as a whole. As such, this initial theory, like the previous two, was rejected. Aside from the factors previously identified, an additional reason for rejecting all three initial theories was that none of them accounted for the full range of issues identified in the Synoptic of Themes.

## **5.2 FRAMEWORK RATIONALE**

The next step towards developing the Theoretical Framework for Research in Interior Design was the formal recognition and acceptance of four recurrent ideas. These ideas were a culmination of thoughts that re-surfaced throughout the analysis phase, and are referred to in Figures 1 (p. 11) and 10 (p. 173) as “conclusive statements.” The



**Figure 10 – Framework Goals and Rationale**  
(Detail of Figure 1)

four conclusive statements were:

1. Recent efforts to establish a research culture in interior design have not been successful.
2. A research culture in interior design can be conceptualized in at least three different ways.
3. The operational definition of interior design requires that the profession support both design and research cultures.
4. There is a need to link the existing design culture to the desired research culture with a third distinct culture. Notably, the word “culture” is used in each of the four statements. How and why the idea of culture became such an important topic within this study is evident in the following explanations.

### **5.2.1 Recent Efforts to Establish A Research Culture in Interior Design Have Not Been Successful**

Recent efforts to establish a research culture in interior design have not been successful because few strategies exist for enabling such a culture to emerge. What exists, instead, are vague suggestions that “more” research be conducted; that more research-oriented graduate programs be offered (Dickson & White, 1994; Guerin et al., 1995b; Thompson & Guerin, 2002); or that design and research merge to form a hybrid called, “design research” (Thompson, 1992).

Suggestions for more research and the existence of more graduate programs may result in larger quantities of research, but the mere existence of more research cannot guarantee that a widespread research culture will result. Such a culture would require not only numerous individuals to produce research, but also would require

the majority of stakeholders within the profession to value research by developing attitudes, beliefs, and behaviours that demonstrate their commitment to research. In order for designers and other non-researchers to value research, these individuals would likely need to have a series of consistently positive research experiences before they would be able to even consider research to be valuable. The literature and findings in this study indicate that, to date, designers have not had such experiences. In fact, designers and other stakeholders have found research to be difficult to understand, and irrelevant to the problems they face.

The adoption of design research as a strategy for promoting research in interior design would not guarantee the existence of a widespread research culture either. The concept of design research is very nebulous and is almost a paradox in itself. As explained in the literature review, design research seems to be nothing more than a convenient hybrid term for the conceptual merging of two quite independent and different activities or cultures.

By its very nature, design is a creative endeavour that tends to be subjective in nature. Research is almost the exact opposite in that it tends to be objective in nature. Designers are educated, trained, and indoctrinated differently than researchers. In short, design and research represent two different cultures, and are two different activities that cannot be merged into one because each one uses unique processes to generate unique products intended to serve unique audiences.

Requiring designers to become design researchers by becoming “informed consumers” of research (LaGro, 1999, p. 185); by understanding “how new knowledge is generated”; by being “able to question the validity of the new knowledge” (John Meunier as cited in Cutler, 2001, p.

*“It’s important to have our students be consumers of information . . . our students don’t necessarily all need to be RESEARCHERS but I think they need to be well-versed in a research process, and be able to be CONSUMERS of research, and be able to differentiate between information that has some solid basis -- whether that’s qualitative or quantitative versus information that doesn’t” (POP 1).*

*“I think the cause is a lack of appetite for any kind of empirical framework to our profession. And, where that comes from is that the dominant paradigm is an artistic paradigm. This is not to say there’s anything wrong with it -- but it is different than a scientific paradigm. People who enter our profession are pursuing a more personal and artistic mission as opposed to a scientific or service-oriented mission. And because of that lack of appetite, research falls between the cracks, or falls on the deaf ears, or however you want to frame that comment. But the truth is, if there were an appetite for it, people would seek it and find it on the Internet, or they would find it in printed form, or they would have grassroots means of gathering and sharing this information. But the truth is, for the most part, there’s not an appetite for research information. And the reason the appetite is not there is not because people are evil or lazy or anything like that, but simply because they’re operating from a different paradigm -- a more artistic than scientific one” (PPP 11).*

34); or by actually undertaking formal research only results in confusion. When designers are required to think like researchers or utilize research processes, they become unsure about which process they are supposed to be using and when, which audience they are supposed to be serving, and which products are supposed to result from their efforts.<sup>1</sup> Overall, the concept of design research attempts to make designers into something they have not chosen to be and, in the process, weakens the inherent nature and strength of the design culture to which they belong and in which they have been trained and educated.

Results of this study suggested that neither students or professional practitioners are interested in becoming researchers but, prefer, instead, the creative, subjective, and intuitive activity and culture of design (CSP 6, 12, 13, 14; EIP 7, 11; PPP 4). Reinforcing this notion were the comments made by one educator participant in this study. He said, “There’s very few [students] that [sic] get excited about research. I mean, I get very excited about research; more excited about research than I do about practice or designing. And, I know I’m the nerd or whatever, but the students are the reverse. I would say the majority are more interested in the design” (EIP 7).

A final criticism of the design research concept is that it does not explain the role that designers and researchers would play once design researchers exist. Would designers and researchers continue to operate independently of design researchers, or would designers and researchers become obsolete? Would researchers and design researchers pursue different topics, undertake different types of research, and use different methods, or would the topics, types of research, and methods be the same for both? Since the literature does not seem to

provide any answers to these questions, the concept, again, appears to be ill-defined or under-developed.

In all fairness, it must be acknowledged that design research may well be in its infancy and further research may be needed before the concept can evolve fully. However, the explanations given thus far make it clear that, as defined currently, design research is an inappropriate theory to pursue for interior design because it implies that the design culture, the very foundation of the interior design profession, would be minimized or replaced with an ill-defined hybrid culture.

Overall, the design research concept, the existence of more research-based graduate programs, and the vague demands for “more” research do not seem to have resulted in evidence-based design solutions or a research culture in the interior design profession. If these strategies had been successful in achieving these objectives, then demands for evidence-based design solutions and for a research culture would not persist in the literature.

While the Theoretical Framework described later in the chapter may not guarantee that a research culture will emerge within the interior design profession, it *does* promote the existence of a communicative relationship between the two distinct cultures of design and research. With the addition of a third culture, the Framework *does* provide a strategy for design solutions to become evidence-based. Finally, the Framework *does* provide educators with a strategy for promoting both design and research, along with a third, “mediating” culture, as distinct, but interconnected, cultures.

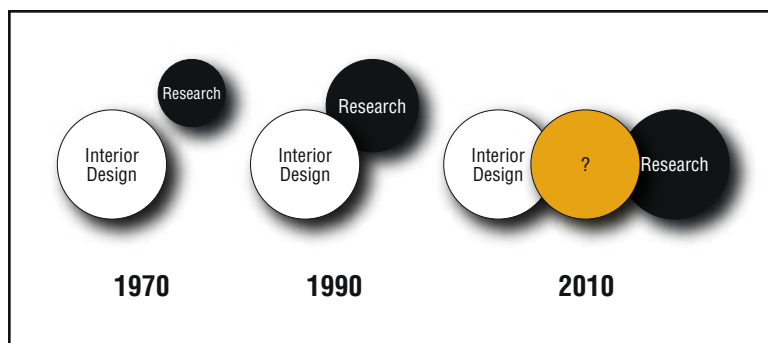
*“Part of the reason I’m in this business is I’m very visual, I like to draw. And I would say that maybe a good portion of the people who are in this business are like me. Having to be scientific and have that kind of mind is just – there’s not a lot of people in our profession that have those minds” (PPP 4).*



### 5.2.2 A Research Culture in Interior Design Can be Conceptualized in at Least Three Different Ways

The conclusion that a research culture in interior design can be conceptualized in at least three different ways was reached when the significance of a study by IIDAF (1999) became evident. In the study, the authors used a simple, but effective, way to show the linkages that exist between decoration, interior design, and architecture. Although the author's findings are not particularly relevant to this study, their approach to conceptualizing the linkages is significant. Using a similar approach, I began to think about the relationship between research and interior design.

I concluded that research could be: (a) less significant than and separate from interior design (as it was in the 1970s and early 80s); (b) more significant than it was in the 1970s and 80s, but subsumed into interior design (as the design research concept promoted during the late 1980s to present); or (c) equally significant and linked to interior design with a third culture (as is proposed here in the Theoretical Framework) (Figure 11).



**Figure 11 – Conceptual Model I**

Recognition of the different ways that design and research can co-exist proved to be a critical turning point in the study. It was at this point that it became evident that *a balance of distinct cultures* was needed in order for a research culture to emerge, for a design culture to be maintained, and for the emergent and existing cultures to be united. Although it was still not clear what the mediating culture should be called, some ideas were beginning to surface which suggested that it should be a distinct culture that could bring the design and research cultures into a more harmonious and productive existence than exists presently. It was also clear that the mediating culture should be a unique, well-defined entity of its own, rather than simply an amalgamation or replication of either design or research.

### **5.2.3 The Operational Definition of Interior Design Practice Requires That the Profession Support Both Design and Research Cultures**

Reinforcing the notion that the existing design culture needed to be maintained (rather than replaced with a research culture or with a design research culture) was the operational definition of interior design practice provided in Section 1.2.2 (p. 7). The definition highlights the need to maintain a design culture because it is the very culture that enables designers to generate context-specific, uniquely creative spatial solutions for clients and end users. Without design, there would be no interior design profession regardless of how much research may exist, or the extent to which a research culture may exist.

At the same time, the operational definition of interior design practice also requires that a research culture be supported within the profession. A research culture would

enable designers to create research-based spatial solutions that meet both client and end user needs. As numerous authors have asserted, without a research culture, the interior design profession will continue to lack recognition, value, and legitimacy.

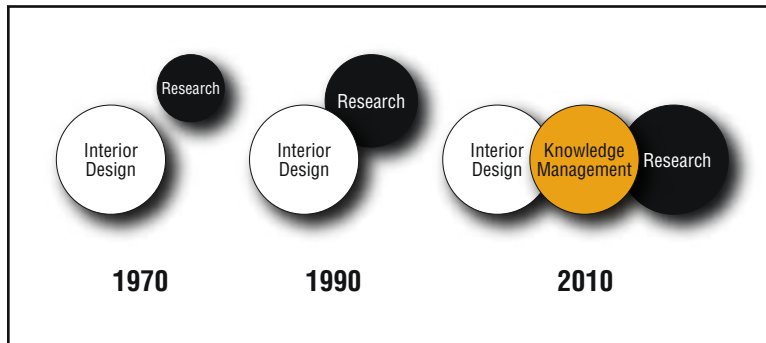
Recognizing the need for the profession to support at least two distinct cultures was an important milestone because it signified a commitment to the idea that the Theoretical Framework should include two separate cultures (design and research), rather than one hybrid culture (design research). The only questions that remained concerned the identifying characteristics of the third mediating culture.

#### **5.2.4 There is a Need to Link the Existing Design Culture to the Desired Research Culture With A Third Distinct Culture**

Designers need researchers to generate knowledge that can inform design, and that can help designers demonstrate the value of design to clients. Researchers need designers to provide them with information about the kinds of topics that need to be researched. Again, in order for individuals within these two cultures to benefit from one another, there needs to be third culture: a culture that is distinct in itself and that, through its inherent and unique processes, is capable of bridging the gap between designers and researchers.

Consideration of the Synoptic of Themes, as well as literature in areas outside of interior design, eventually led to the conclusion that the third, mediating culture should be that of “knowledge management” (Figure 12, p. 181). Knowledge managers would be able to collect, analyze, transform, and disseminate research, ideas, information, and design problems, not only to designers and researchers, but

also to other stakeholders within and outside the profession. Further details about the knowledge manager and the knowledge management culture are provided later in the chapter.



**Figure 12 – Conceptual Model II**

Based on the conclusive statements described in this section, the rationale for the Theoretical Framework for Research in Interior Design seemed clear: in order to enhance communication between the existing design culture and the sought-after research culture (and thereby enable a research-based profession to emerge), there needed to be a third culture that was distinct in its own right, and that could bridge the gap between the design and research cultures.

### **5.3 FRAMEWORK GOALS**

Based on the rationale for the Framework and the Synoptic of Themes described in Chapter Four, goals for the Theoretical Framework for Research in Interior Design were established. The Theoretical Framework for Research in Interior Design needed to: (a) identify distinct cultures,

(b) enhance communication between cultures and stakeholders, and (c) promote relevant research.

### **5.3.1 Identify Distinct Cultures**

The Theoretical Framework for Research in Interior Design needs to establish distinct design, research, and knowledge management cultures so that the roles, expectations, and limitations of each culture are clear. Without a design culture, the profession of interior design would cease to exist. Without a research culture, the profession risks ongoing devaluation. Furthermore, without a knowledge management culture, individuals in the design and research cultures might never come to respect, value, and benefit from one another.

### **5.3.2 Enhance Communication Between Cultures and Stakeholders**

The Theoretical Framework for Research in Interior Design needs to ensure that designers and researchers benefit from the expertise of one another. The Framework also needs to promote communication and linkages between clients and/or end users and researchers, and between designers and researchers. Finally, the Framework needs to promote communication between stakeholders both within and outside the profession.

These linkages are necessary because: (a) research needs to be used by designers in order for designers to produce evidence-based design solutions; (b) researchers need to understand issues that are important to clients, end users, and practitioners; and (c) increased value for the profession will occur only when all stakeholders are aware of the knowledge and research that exists in interior design, and are aware of the roles they could potentially play in

supporting research in interior design.

### **5.3.3 Promote Relevant Research**

The Theoretical Framework needs to promote relevant research. The need for relevant research is critical because, without it, practitioners will be unable to produce evidence-based design solutions, and the profession will be unable to convince external stakeholders about the value of interior design. To promote relevant research, the Theoretical Framework needs to enable the translation of basic research into knowledge that designers can understand and use, and that clients and end users can understand and value. Conversely, issues that are important to designers, clients, and end users need to be translated into research problems that researchers can investigate. The knowledge manager proposed in the Theoretical Framework will need to ensure that these translation processes take place.

## **5.4 FRAMEWORK COMPONENTS**

The characteristics of the Framework for Research in Interior Design are consistent with those described in Chapter Two. As such, the Framework consists of a well-defined, interrelated set of concepts (i.e., the three cultures) linked together with well-explained statements of relationship (the rationale and goals described earlier) that describe who, what, when, where, why, and how research in interior design could be conducted, translated, used, and disseminated. The detailed explanations in this section, about the purpose, process, and products of each culture, provide insight into the theoretical and practical foundation of each culture.

The Theoretical Framework consists of three distinct cultures: (a) interior design, (b) knowledge management, and (c) research. In Figure 13, the knowledge management culture is situated between the interior design and research cultures to signify knowledge managers' roles as mediators between designers and researchers. Each column in Figure 13 describes a particular facet of the three cultures, including the theoretical foundation, purpose, process, and products associated with each one.

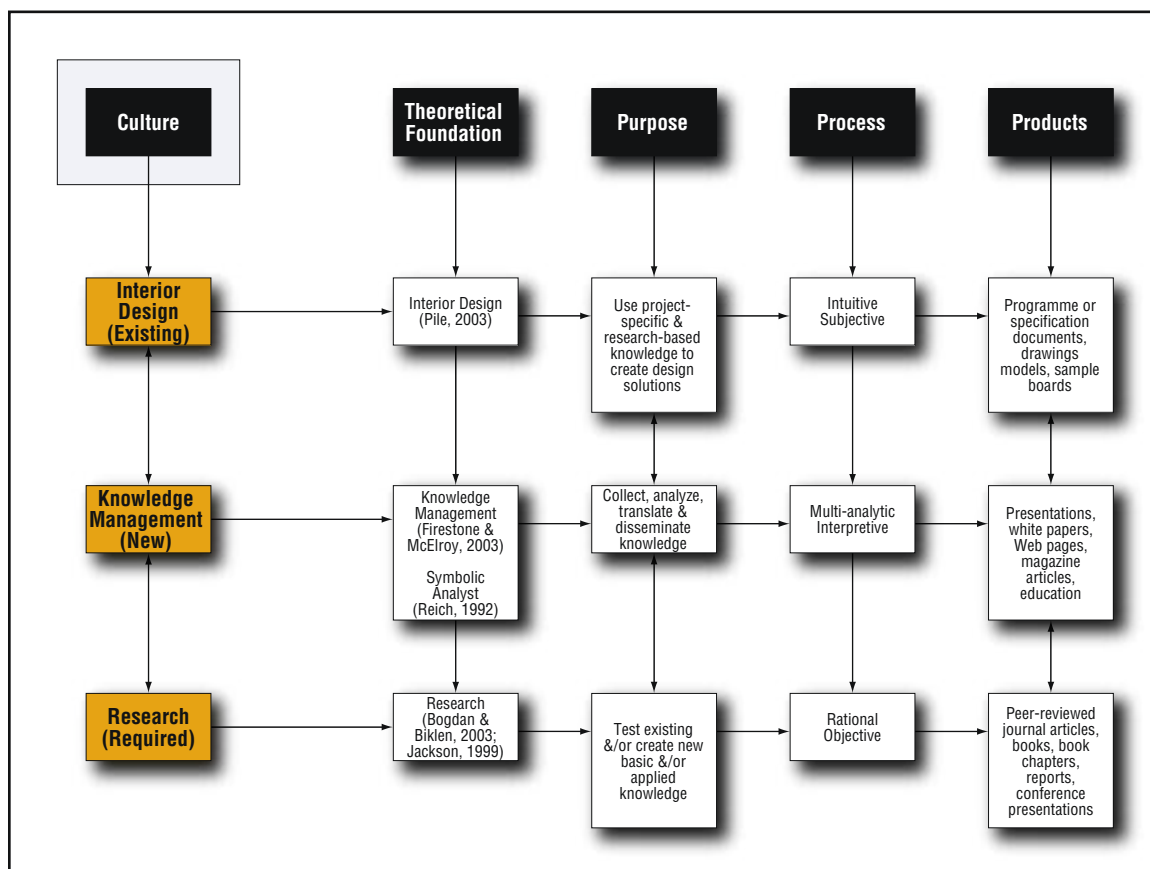


Figure 13 – Theoretical Framework for Research in Interior Design

### 5.4.1 Theoretical Foundation

The theoretical foundation provides a general description of the basis upon which each culture would be established. Explanations provided later in this section expand on these foundational descriptions by describing the purpose, process, and products associated with each culture.

#### 5.4.1.1 Interior Design Theoretical Foundation

The theoretical foundation for the interior design culture is consistent with current descriptions of interior design by John Pile (2003) and others (Allen, Jones, & Stimpson, 2004; Kilmer & Kilmer, 1992). Pile describes, in his book, *Interior Design*, the knowledge and processes upon which the profession is based: (a) principles of space planning; (b) human factors and social responsibility; (c) the theory and practice of selecting and specifying materials, color, lighting, textiles, furniture, and accessories; (d) the theory and practice of mechanical systems (including building codes); (e) principles and practices of the business of interior design; and (f) a seven-stage design process (project beginnings, programming, concept development, design development, design implementation, project supervision, and post-completion).

Based on Pile's (2003) description of the interior design knowledge base and process, the culture of interior design can be described as one in which designers are trained to: (a) understand and value human behaviour and human factors; (b) design in socially responsible and ethical ways; and (c) utilize both creative and rigorous processes that ensure the creation of safe, functional, and aesthetically-pleasing environments for the intended occupants. This description is consistent with the National Council for Interior Design Qualification's (NCIDQ's) (2004) definition



of interior design (see note 2, pp. 13-14), and with the operational definition of interior design practice described in Chapter One (p. 7).

#### **5.4.1.2 Research Theoretical Foundation**

The theoretical foundation for the research culture is based on descriptions of research provided by Jackson (1999), and Bogdan and Biklen (2003). Jackson describes the knowledge base and process of research in the social sciences disciplines as those that include:

(a) methodological approaches (i.e., positivist, interpretive, critical); (b) theory types; (c) research methods (i.e., qualitative versus quantitative); (d) research designs (e.g., experimental, quasi-experimental, survey, field studies); (e) principles of measurement (e.g., reliability, validity, indexes, scales); (f) methods of data analysis (i.e., statistics); (g) ethical issues; (g) and a nine-stage process for undertaking research investigations (problem selection, design, development of procedural instruments, sampling, data collection, data coding, data entry, data analysis, and final report).

In education, Bogdan and Biklen (2003) cover topics similar to those described by Jackson (1999), but they do so from the perspective of qualitative research. Together, the descriptions of research provided by Jackson, and Bogdan and Biklen provide a comprehensive theoretical foundation for the research culture promoted in the Theoretical Framework for Research in Interior Design.

Based on Jackson (1999), and Bogdan and Biklen's (2003) descriptions of the research knowledge base and processes, the culture of research can be described as one in which researchers are trained to: (a) understand the various approaches to knowledge generation and interpretation; (b) value the generation of new, or the testing

of existing, knowledge; (c) conduct and report research in ethically responsible ways; and (d) utilize both systematic and objective processes to ensure that research results are valid and/or trustworthy. This description is more detailed than, but consistent with, the operational definition of research described in Chapter One.

#### **5.4.1.3 Knowledge Management Theoretical Foundation**

The theoretical foundation for the knowledge management culture is based loosely on the knowledge management discipline promoted by authors in business management (Firestone & McElroy, 2003), and on the symbolic analyst concept described by economist, Robert Reich (1992). Since knowledge management is an arguably new and emerging discipline, there is little agreement among authors about its knowledge base or processes. Likewise, no real knowledge base or specific set of processes exists for the symbolic analyst concept described by Reich. Nevertheless, the explanations that follow describe which portions of the knowledge management and symbolic analyst concepts are applicable to, and appropriate for, the theoretical foundation of the knowledge management culture proposed in this dissertation.

According to Firestone and McElroy (2003), knowledge management is a social science or “management discipline that seeks to enhance organizational knowledge processing” (p. 70). Knowledge managers are trained to capture and analyze knowledge for the purpose of capitalizing on human resources within a company. As such, knowledge managers: (a) value ideas from employees, (b) utilize discussion as a primary means of capturing knowledge, (c) utilize codification as a way to document information, and (d) disseminate information by distributing reports. Firestone and McElroy acknowledge

that these tasks may have been, at one time, the responsibility of senior managers, but within the present day knowledge society, knowledge managers have now assumed exclusive responsibility for these tasks.

The knowledge management theory described by Firestone and McElroy (2003) provides a partially appropriate theoretical foundation for the knowledge management culture proposed in this study because it promotes an organized approach to the management of information and knowledge. Firestone and McElroy's knowledge management theory is inappropriate, however, because it focuses on the sole betterment of the individual company, rather than on the management of information and knowledge for the good or benefit of a larger whole. The purpose of the knowledge management culture in this study is to capitalize on knowledge that exists both inside and outside of design firms, and to promote the sharing of information across and outside the profession.

The theory behind the symbolic analyst concept described by Reich (1992) also provides only a partially appropriate theoretical foundation for the knowledge management culture conceptualized here. Reich describes symbolic analysts as individuals who:

. . . solve, identify, and broker problems by manipulating symbols. They simplify reality into abstract images that can be rearranged, juggled, experimented with, communicated to other specialists, and then, eventually, transformed back into reality. The manipulations are done with analytic tools, sharpened by experience. The tools may be mathematical algorithms, legal arguments, financial gimmicks, scientific principles, psychological insights about how to persuade or amuse, systems

of induction or deduction, or any other set of techniques for doing conceptual puzzles. (p. 178)

What is relevant about Reich's concept is that it promotes the analysis, synthesis, and transformation of information from one form to another. As is explained shortly, these activities constitute one of knowledge managers' primary purposes. The symbolic analyst theory is also appropriate because it promotes collaboration and networking outside the company where the symbolic analyst, or knowledge manager in this case, would be employed.

What is inappropriate about Reich's (1992) theory is the idea that it promotes "thought and communication" rather than "tangible production" (p. 182). The knowledge managers promoted in the Theoretical Framework would, indeed, spend time thinking, but would also be expected to document the products of their thinking. Furthermore, knowledge managers in interior design would be expected to disseminate the products of their thinking to designers, researchers, and other stakeholders both inside and outside the profession (e.g., government, industry, clients, end users).

In the Framework proposed in this study, knowledge managers are envisioned as individuals who: (a) through discussion with interior design stakeholders, identify issues or problems that need to be addressed through research; (b) collect, analyze, and transform information; and (c) disseminate transformed information to interior design stakeholders. Additionally, the culture of knowledge management is envisioned as that in which knowledge managers are trained to value communication between interior design stakeholders, particularly designers and researchers, but also between clients, end users, and researchers. Knowledge managers would also be expected

to utilize multiple procedures and methods for collecting, analyzing, translating, and disseminating information to stakeholders both within and outside the profession.

With the existence of knowledge management, the interior design profession would consist of three distinct, but interconnected, cultures or groups of individuals: (a) interior designers responsible for using research to generate creative design solutions; (b) researchers responsible for generating and testing both basic and applied research that contributes to the profession's knowledge base, and that designers can use; and (c) knowledge managers responsible for facilitating communication between interior design stakeholders. The distinct theoretical underpinnings of each culture would enable each one to function independently, and therefore maintain its unique cultural identity. At the same time, because of the very nature and purpose of the knowledge management culture, the cultures would, in fact, be interconnected.

The importance of interconnection was discussed in a recent document by the Social Sciences and Humanities Research Council (SSHRC) (2004). The document describes SSHRC's plans to re-structure their organization to become what the Council calls a "Knowledge Agency." As a knowledge agency, SSHRC believes that interconnecting research producers, users, and mediators will be necessary so that research can "find its way to those who can apply and benefit from it" (p. 13). Connecting research producers, users, and mediators will require relationships similar to the ones described in the Theoretical Framework for Research in Interior Design: relationships where there are "interfaces among producers and users of research knowledge," "where users would work directly with researchers to produce knowledge, and where researchers and others, including

knowledge mediators” might interact with one another either formally or informally (SSHRC, pp. 13-14).

## **5.4.2 Purpose**

### **5.4.2.1 Interior Design Purpose**

In the Theoretical Framework proposed here, the interior designer’s primary purpose would be to use both project-specific and research-based knowledge to create evidence-based design solutions. Interior designers would also utilize their educational training, experience, and intuition to design context-specific, uniquely creative spatial solutions that meet both client and end user needs.

### **5.4.2.2 Research Purpose**

Within the research paradigm, the primary purpose of the researcher would be to test and/or create knowledge for the purpose of generating basic and/or applied research. Such research would contribute to the theoretical knowledge base of the profession, and would help designers with practical problems. Researchers would function according to the theory, processes, and culture of research described earlier. This means that researchers would develop research topics, collect and analyze data, write the results of their research using formal research terminology, and disseminate their findings in peer-reviewed journals. Like designers, researchers would not attempt to take on responsibilities, or use processes, not consistent with their culture. Consequently, they would refrain from translating research into layman’s language.

### **5.4.2.3 Knowledge Management Purpose**

The knowledge manager’s primary purpose would be to collect, analyze, translate, and disseminate knowledge to stakeholders within the profession. More specifically, knowledge managers would: (a) collect information

*“Knowledge like material must undergo transformation to be of value. Raw theory like raw material will have no practical value until there exist the social imagination to extract it, the technical ability to refine it, and the industrial organization to transform it. And this process is the responsibility of everyone involved, not just the research worker. His [sic] responsibility is to lay down the strata of theory, it is for others to quarry them for practical ends” (March, 1974, p. 2).*

from various sources including designers, clients, end users, industry, researchers, educators, students, and governments; (b) analyze the information collected by using a wide array of analysis techniques, and by “filtering” the information through whatever “lens” is necessary (e.g., interior design, management, business, marketing, psychology, education); (c) transform the information into languages appropriate for various audiences; and (d) disseminate the transformed information to the intended audiences through presentations, post-secondary or continuing education courses, white papers, Web pages, magazine articles or any other form of dissemination appropriate for communicating with the target audience/s.

Knowledge managers would not function as designers or researchers, per se, although they would be educated in both of those areas and able to function in either capacity if they so chose. With additional education in areas besides design and research, knowledge managers would specialize in the translation of research findings into design implications and design problems into research problems. Given these particular skills, knowledge managers could be considered to be educators since they would perform precisely the tasks that educators perform.

Parallel functions between knowledge managers and educators include: (a) analyzing, synthesizing, translating, and disseminating knowledge to a variety of audiences; (b) directing research; and (c) facilitating communication between various stakeholder groups. In fact, because of their diverse training, knowledge managers could be employed not only in design firms, but also as educators within post-secondary education institutions, professional organizations, industries, or government institutions. Explanations follow about how knowledge managers would

function within some of these contexts.

Knowledge managers employed at design firms could transform a design project into a research problem, and communicate the problem to a researcher who might be situated at a university. The researcher would then use formal research processes and techniques to solve the problem, and would present his or her findings in a format typical for the research culture (e.g., a peer-reviewed journal article). Knowledge managers would then obtain and analyze the research results, transform the results into a language that is easy for designers or other stakeholders to understand, and disseminate the transformed knowledge to designers working within the profession via presentations, education courses, magazine articles, the Internet, or any other means that seems appropriate.

Knowledge managers employed in design firms could operate in other ways as well. For instance, they could liaise with educators and students bringing them up to date on issue relevant to practice. Conversely, students and educators could provide knowledge managers with ideas about theories and innovations that they are pursuing. Knowledge managers could also play a role in linking designers with industry. They could present design problems that require industry research to relevant companies, retrieve their results, and assist practitioners with their application in a professional design context. Finally, knowledge managers employed at design firms could communicate with clients and end users thereby identifying potentially relevant research or design issues.

Knowledge managers employed at a post-secondary institutions would function like other educators. As such, they would: (a) translate, distill, and disseminate knowledge to a variety of audiences, but especially to



students; (b) direct student research; and (c) participate in their own research endeavours. In keeping with their primary purpose, knowledge managers could fulfill service requirements at the institution where they are employed by liaising with, and disseminating information to, stakeholders outside of their immediate employment environment.

Knowledge managers employed at professional organizations could also function as educators by delivering continuing education courses. Again, with their diverse education and training, knowledge managers in professional organizations would also be able to perform other tasks as well. In addition to liaising between industry, education, and practice, they could also ensure that appropriately distilled information is disseminated to stakeholders using multiple languages and formats.

In some ways, knowledge managers would serve a purpose similar to what the American Society of Interior Designers (ASID) and the University of Minnesota have attempted to do through the *InformeDesign Website*. However, rather than being a static entity, using the vocabulary of formal research, and forcing designers to learn that vocabulary, knowledge managers would communicate findings to designers in interactive ways and in languages that designers and other stakeholders could understand. In addition, knowledge managers would function in ways that the *InformeDesign Website* cannot, because knowledge managers could aid researchers by identifying potential research problems stemming from actual practice, real clients, and real end users.

Could researchers or designers become knowledge managers? While the obvious answer appears to affirm this possibility, it must be remembered that once an individual attempts to operate within a different culture,

then he or she risks becoming overwhelmed or confused by conflicting cultural processes and expectations (e.g., which processes to use, which audiences to serve, which products to generate). Without proper education or training, individuals attempting to act as knowledge managers would likely solve problems utilizing the processes they are most familiar with. Using familiar, but not necessarily appropriate processes, would not consistently result in the kinds of transformed knowledge that knowledge managers would be capable of producing. Later in the chapter, it is clear that the development of a knowledge management culture will require a unique educational curriculum.

Literature, data, and theoretical memos provide numerous references to the need for knowledge managers. Sometimes, the knowledge manager is described in the literature as a “third party” (Szenasy & Johnson, 2000, p. 42), “bridging person” (PPP 12), or “connector” (PPP 12). Literature and the data also provide insight into the range of opinions that exist about who should translate research. For example, some individuals believe that researchers should be translators (Frankel, 1998a, 1998b; PPP 13). Others believe that designers should be translators (EIP 3; Szenasy & Johnson, 2000). Yet a third group of individuals believe that translation should be taught in interior design education programs (IIDA, 2003; Zube, 1980).

Given these opinions, the message is clear that a research translator or interpreter is needed in the interior design profession. Szenasy and Johnson (2000) emphasize this need with their statement that:

If one thinks of the design process as simply consisting of three pieces - research, translation, and application, then the academics are just as easily “on the hook” for the first piece, and the profession,

the last. But the real value and challenge is in the middle piece. What can academics do to make their research more applicable? Can practitioners learn to interpret and apply the research for themselves as a part of the contribution to their own design process? Do we need a third party to sit between the two? (p. 42)

The Theoretical Framework suggests that this “third party” should be a distinct culture that is fully integrated into the interior design profession.

### **5.4.3 Process**

#### **5.4.3.1 Interior Design Process**

The Theoretical Framework suggests that interior designers utilize the design process described earlier by Pile (2003). He asserts that designers begin projects by identifying the problem to be solved, undertake programming, develop a concept, develop the design solution, implement the design solution, supervise the project, and evaluate the completed, built environment. The subjective and/or intuitive forms of analysis and decision-making that designers utilize in this process are important techniques that, in part, enable them to create the unique solutions that they do. Objectifying or formalizing the design process by introducing more formal means of information analysis, such as those associated with formal research, could potentially result in less creative design solutions because designers may feel they do not have the freedom that intuition and subjectivity afford.

Consequently, while knowledge managers could enhance the decision-making process of designers by providing them with research-based knowledge, the Framework advocates for interior designers to continue to

utilize the processes that are consistent with the design culture.

#### **5.4.3.2 Research Process**

The Theoretical Framework for Research in Interior Design suggests that researchers also utilize the process consistent with their culture. For researchers, this process generally would include the stages described earlier by Jackson (1999).

The systematic, objective means of analysis used in research, and the language and vocabulary used to convey research findings, are two of the unique features that make research what it is. Knowledge managers could enhance the research process, however, by providing researchers with insight into practical problems that designers, clients, or end users might face. Knowledge managers would be adept at communicating these problems to researchers because, having been educated in formal research methods, they would understand, and be able to use, the language and vocabulary familiar to researchers.

#### **5.4.3.3 Knowledge Management Process**

Knowledge managers would utilize a process that involves problem identification, information collection, analysis, synthesis, and dissemination. Knowledge managers would identify problems by talking to both internal and external stakeholders, including designers, researchers, educators, students, industry, government, clients, end users. They would collect information using a variety of methods, including conversations, formal interviews, surveys, literature searches, and observation. The information collected would be analyzed using the techniques described earlier by Reich (1992). These techniques could include, “mathematical algorithms, legal arguments, financial gimmicks, scientific principles,

*“The data set that you’re looking at are just that – they’re raw data sets. They still have to be assimilated and have to be processed. You have to look for the trends, look for the patterns, look for the common denominators, look for the anomalies. And then you have to decide what that means. And, of course, that’s the kind of best part of the consultant’s mindset that many of our people have. But then, ultimately, somebody has to say, ‘Well, then how would it realize itself in the built environment?’” (PPP 2).*

psychological insights about how to persuade or amuse, systems of induction or deduction, or any other set of techniques for doing conceptual puzzles” (p. 178). Whatever the analysis techniques used, symbolic analysts, according to Reich, experiment and think abstractly by discovering patterns and meanings within seemingly unrelated data or information. As such, the process that knowledge managers would utilize might be described as multi-analytic and interpretive.

In addition to analytic skills, an important aspect of the knowledge management process is synthesis. Knowledge managers would need to be able to transform information from one language into another so that the intended audiences would be able to both understand and utilize the transformed knowledge. For instance, knowledge managers would need to be able to translate research into a language that designers can understand or, conversely, translate a design problem into a language that relates to researchers. Again, with expertise and skills in synthesis and translation, knowledge managers could function very well as educators.

The final component of the knowledge management process would be the dissemination of transformed knowledge to a particular audience or to multiple audiences. Depending on the nature of the information, the purpose for which the information was transformed, and the target audience/s, knowledge managers may disseminate information using a variety of techniques. These techniques are discussed shortly (see Section 5.4.4.3, p. 200).

#### **5.4.4 Products**

Included in this section are descriptions of the primary, secondary, and tertiary audiences that each culture

would serve, and the corresponding physical artifacts that could be presented to each audience.

#### **5.4.4.1 Interior Design Products**

Interior designers' primary audiences are clients and end users. As such, the products designers generate would typically include programme documents, design drawings, three dimensional or computer-generated models, specification documents, and sample boards of color, materials, and other elements.

Secondary audiences for designers include contractors for whom the primary products would be construction drawings and specification documents.

A tertiary audience for designers is the public which, incidentally, might also include other designers who would benefit from a magazine article about a completed project.

#### **5.4.4.2 Research Products**

Researchers' primary audiences are other researchers and academics. As such, researchers would disseminate their findings in the form of formal research reports, journal articles, books, or conference presentations.

Although a secondary audience for researchers would also include knowledge managers, dissemination to this audience would not require researchers to do anything special. That is to say that it would be the knowledge manager's responsibility to gather research from journals and other sources where researchers publish their findings.

Tertiary audiences for researchers are designers, clients, and end users. Again, however, researchers would not be required to translate their findings into layman's, designers', or clients' languages, or disseminate to these audiences directly, because the knowledge manager would assume these responsibilities.

*“Here’s a question, ‘Why does the design profession primarily promote itself in the design press?’ That’s not what your clients read. That’s what your competitors read. So, you spend thousands of dollars on an annual to tell your competitors what your best ideas were” (PPP 12).*

#### **5.4.4.3 Knowledge Management Products**

Knowledge managers’ primary audiences would be design practitioners, researchers, and students. For dissemination to designers, knowledge managers could produce white papers, generate magazine articles, create Web pages, or offer continuing education courses. To disseminate to researchers, knowledge managers could produce research proposals describing areas of needed research. To communicate with students, knowledge managers could produce lectures, assignments, and design and research projects.

Secondary audiences for knowledge managers would include clients and end users. Dissemination to these groups could occur through presentations, research summaries, or white papers written in plain or layman’s language.

Tertiary audiences for knowledge managers would include the public. Dissemination to the public could occur through presentations, keynote speaking engagements, or through publications in popular design magazines.

The existence of three distinct, yet interconnected, cultures is a better alternative for the evolution of the interior design discipline than the design research theory currently being promoted within interior design and other design professions. Three cultures, as opposed to one hybrid culture, is appropriate for interior design because it enables each culture to function independently and without pressure to perform tasks and utilize processes that fall outside the boundaries of each specific culture. Unfettered by extraneous cultural processes or expectations, members of each distinct culture can focus on developing expertise within that culture’s boundaries.

## **5.5 IMPLICATIONS OF THE FRAMEWORK FOR POST-SECONDARY INTERIOR DESIGN EDUCATION**

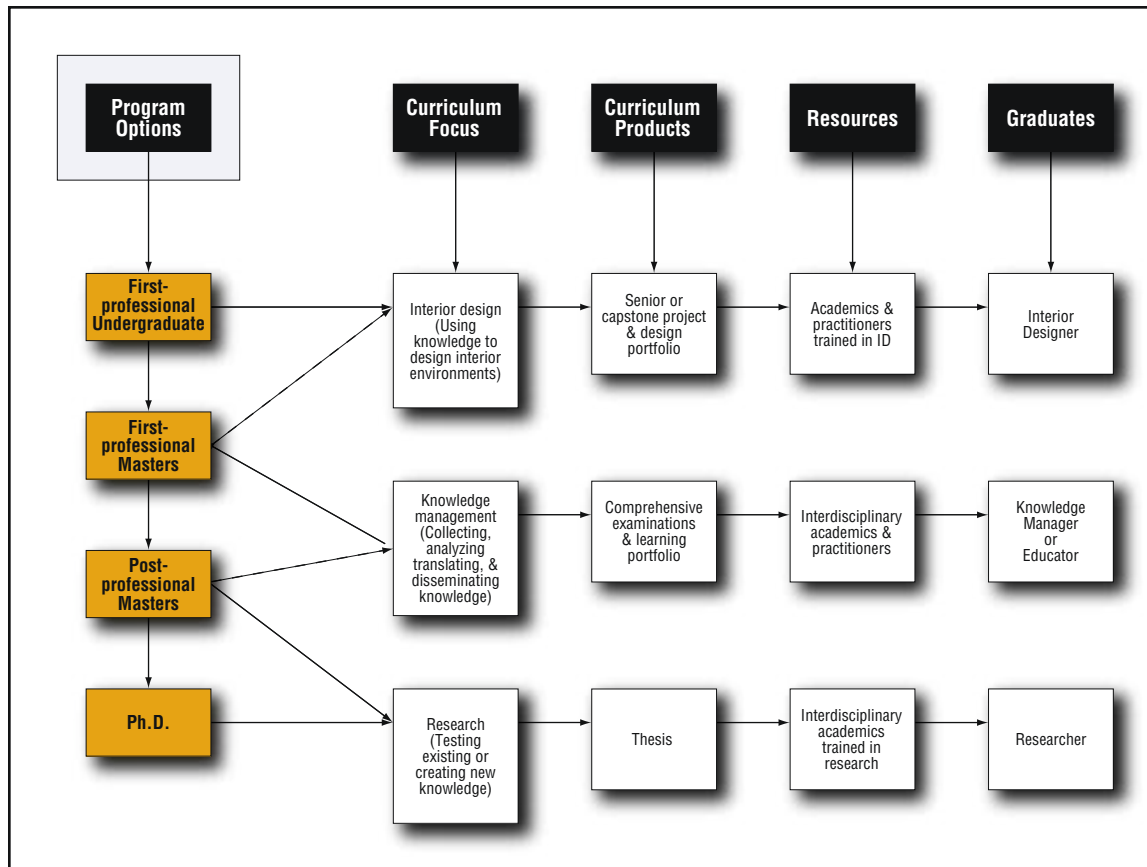
This section focuses on the implications of the Theoretical Framework for Research in Interior Design for post-secondary interior design education in Canada and the United States. The discussion centers on the relationship between the three main cultures (design, research and knowledge management), and the four existing program types (first-professional undergraduate, first-professional graduate, post-professional graduate, and Ph.D.). Also included in this section is information about the curriculum focus, curriculum products, resources, and graduates required for, and resulting from, each program.

### **5.5.1 Program Orientation Options**

Figure 14 (p. 202) illustrates two ways in which the Theoretical Framework can be incorporated into interior design education. The first option proposes that first-professional undergraduate programs focus on interior design, first-professional masters programs focus on knowledge management, and post-professional masters and Ph.D. programs focus on research. The second option proposes that undergraduate and first-professional masters programs focus on interior design, that post-professional masters programs focus on knowledge management, and that Ph.D. programs again focus on research.

The first option is preferred for several reasons. Option One: (a) provides a clear focus for each program level and type, especially for first-professional masters programs which have been criticized for their lack of specific purpose; (b) promotes a strong formal research agenda by having two program types (post-professional and Ph.D.) focused on research; and (c) promotes a strong design





**Figure 14 – Implications of the Framework for Post-Secondary Interior Design Education**

culture within first-professional undergraduate programs, a cultural foundation which is critical for the profession. Further explanations of Options One and Two follow.

#### **5.5.1.1 Option One**

##### **5.5.1.1.1 First-Professional Undergraduate Program**

In the first program orientation option, the curriculum focus of the first-professional undergraduate degree would be interior design as advocated by Pile (2003). Supporting Pile's view of interior design, Guerin et al. (1995b) explained that undergraduate interior design

education focuses on “the basic content of design theory, aesthetics, design process, human needs and design technology. This emphasizes the ‘how’ of the relationships between people and place and a little of the ‘why’ of these relationships” (para. 3).

In order to graduate from a first-professional undergraduate program, students would be required to produce a senior or capstone project, most likely consisting of a programme document, drawing set, materials samples, and possibly models. Students would also be required to produce a design portfolio consisting of a range of work completed throughout the program.

Important resources in this program would include faculty with expertise in both the theory and practice of interior design. Finally, students enrolled in the undergraduate program would graduate as interior designers and would be employed as such.

Essentially, the interior design program advocated in this option is similar to the majority of first-professional undergraduate currently accredited by the Foundation for Interior Design Education Research (FIDER). While there may be pedagogical differences about how existing programs function, because these programs are accredited by FIDER they are, to some extent, “remarkably homogeneous” (IIDAF, 1999, p. 39). The strength of these program would be that their promotion of the design culture that is critical to the interior design profession.

#### ***5.5.1.1.2 First-Professional Graduate Program***

The focus of the first-professional masters program would be knowledge management. The need for a program that is entirely new to interior design is warranted. Thompson and Guerin (2002), for example, wrote about the possibility of a “new paradigm” for interior design

*“In many cases, the structure of design education does not prepare designers for the work environment. This inconsistency may be due in part to the fact that design students are often isolated from other disciplines, focusing the majority of their education on fulfilling the requirements of a design program rather than seeking a more broad, business-based curriculum. The net result is designers who excel in the artistic environment and fumble through the rationale of the business world.*

*The challenge, then, becomes one of balance. Designers must interact with other disciplines to gain insight into the mindset of the business person” (Oliveri, 2000, p. 44).*

curriculum, and raised two important questions: “Is there a new paradigm for Interior Design; perhaps one that does not rest in a preconceived home, but that stands on its own? Is there an Interior Design curriculum that transcends traditional definition and constraints that has not been identified?” (p. 7). The knowledge management program described in this dissertation constitutes just such a new paradigm.

The major goals of the knowledge management curriculum would be to educate students in “multiple languages” (Friedrichs, 2001, p. 7) and enable them to develop a wide array of analytic skills. The authors of the International Interior Design Association Foundation (IIDAF) (1999) study about interior design education and practice suggested that, “In order to graduate designers who can competently interact with individuals within and beyond interiors firms, schools must create collaborative models currently not in place at schools. Students need a better understanding of [how] the varied roles interrelate in firms to execute interiors projects” (p. 46). Given these comments, the curriculum for a first-professional knowledge management program could focus on a diverse range of topics including interior design, research methods, business management, and real estate issues. Other curriculum foci could include marketing, communications, psychology, sociology, and anthropology. Such a diverse curriculum would be needed in order to ensure that knowledge managers would be able to speak multiple languages and, therefore, communicate effectively with designers, researchers, and other interior design stakeholders.

The need for multiple languages and a diverse range of subject areas has been expressed by numerous interior designers. Some authors and participants in this study

suggested that interior design programs need to include more education concerning business issues (Beckman, 2001; EIP 11; Friedrichs, 2001; IIDA, 2003; PPP 3, 12). Sara Beckman, for example, wrote that, “design schools must pay more attention to business issues in their curricula [sic]” because understanding business issues “will allow designers to more readily integrate themselves into the business environments in which most will work” (p. xiv).

Ed Friedrichs (2001) explained the importance of multiple languages:

We have also learned in the architectural and interior design professions that we need to be multilingual. What does that mean? Well, when we speak to each other, we speak in a language of design. We talk about the impact of design, the influence of design, and the way we are designing in a language that means something to us. It is a shorthand or cryptic way of talking about what we are doing and why we are doing it. Clients are not trained. They are not schooled in that language. In fact, clients are schooled more in business speak. This is why designers need to take business classes. Lenders and the financial officers in the organizations we serve are schooled in an entirely different language. When you are presenting before a public body, a planning commission, an architectural review board, or any committee that governs whether something is going to be approved you have got to speak yet another language. You are always putting yourself into the culture of the enterprise that is before you that has to say yes to what you are doing. It is a simple concept -- design is highly collaborative.

*“We’re corporate designers and if we don’t know our clients’ business or how they conduct business or what they read, [then] we can’t communicate with them” (PPP 1).*

Architectural and interior design plans are not worth the paper they are drawn on or the computer bites [sic] that they are contained in. To get it built, you need to be able to speak the language of at least five people -- the owner, the users, the architectural review board or any discretionary review body, the building department themselves, and, certainly, the financier. By the way, very few people -- other than those of you who will build houses in your lifetime who hire you to do the work will pay for it. Somebody else is always paying for it, and they have a completely different agenda from the person who hired you. Therefore, you must speak the language of each of them in order for each of them to participate. (p. 7)

The knowledge management program would provide a unique and appropriate opportunity for incorporating business knowledge and knowledge from other disciplines into interior design education.

In order to graduate from a knowledge management program, students would be required to write comprehensive examinations and produce a learning portfolio. The examinations would test students' knowledge in different disciplines, their ability to analyze and synthesize information, and their ability to communicate in multiple languages to multiple audiences. The learning portfolio would enable students to demonstrate their design and communication skills.

The knowledge management program would require a diverse range of resources. Critical to the success of the program would be an interdisciplinary group of educators and practitioners with expertise in design practice, organizational and business management, research

methods, and communication methods like Web page design and writing skills. Other educators would be required to have expertise in areas like psychology, sociology, and anthropology. These educators may necessarily be situated faculties or colleges outside of interior design.

In addition to theoretical knowledge about design, research methods, and business management, educators would need to be acutely aware of problems and issues that exist in practice today. The authors of IIDAF's (1999) study wrote, "What new knowledge should faculty bring to interiors programs? More exposure to disciplines beyond conventional interior design (such as the social sciences and business) would help build the uniqueness of interior design by expanding its horizons" (p. 45). A participant in this study said, "What I think is that it would be really really helpful for academics to understand how the business world works" (PPP 3).

As mentioned earlier, knowledge managers could be employed not only in design firms, but also in post-secondary education institutions, professional organizations, industry, or government. Results of this study indicated that some firms already employ knowledge managers (although they are not called "knowledge managers"), or people with multiple languages and diverse educational backgrounds. Firms have created these positions, sometimes in an ad hoc fashion, in order to respond to increasingly complex design situations (CSP 1; PPP 2, 8, 12).

With formal education and training, knowledge management graduates would be an asset to firms looking for individuals with a strong understanding of interior design, research, and business, as well as the ability to communicate with and between designers, researchers, clients, and other stakeholders. With such skills, knowledge

*"Most of our people are dual degree and then they have most often combined their design degree with a business degree. So, when I say that the majority of the team has interior design I wouldn't want you to get the perspective that they're JUST interior designers. These are people who have, for whatever reason, gone to university thinking they had an affinity for interior design and emerged from it realizing that they were much more of an analyst or a strategist or a consultant and they really didn't want to do DESIGN per se as much as they wanted to do analytical consulting work" (PPP 2).*

managers would also be well-positioned to be assume positions as educators at any number of institutions or organizations.

#### **5.5.1.1.3 Post-Professional Graduate and Ph.D. Programs**

Post-professional masters and Ph.D. programs would focus on research. The curriculum in these programs would likely include courses such as theory, current issues in interior design, and research methods. In order to graduate from these programs, students would be required to demonstrate their knowledge of basic and applied research methods by producing a thesis or dissertation.

Resources needed to offer these programs would include educators who have education and experience in conducting research, are intimate with interior design issues, and who are engaged in research themselves. Graduates of these programs would likely pursue careers in academia or as specialized research consultants in interior design firms, industry, government or other areas.

The strength of post-professional masters and Ph.D. programs is that they would produce the graduates needed to undertake research in interior design. As explained in Section 2.2.1.2.1 (p. 38), there is a need for individuals *within* the profession to produce the research needed for the profession (Dickson & White, 1993; Drab & Thompson, 2000; Hasell, 1993; White & Dickson, 1994). Guerin et al. (1995b) wrote:

. . . we can't get enough quality research generated or available for design practitioners or industry until we have more designers completing graduate degrees in interior design. They will be the people to provide the profession with research-based, specialized knowledge that will increase our ability to

solve problems that focus that focus on interactions between people and spaces. (para. 7)

This statement makes it clear that the future of the profession, and the possibility of it becoming recognized as an evidence-based profession, are dependent upon the existence of three distinct but interconnected cultures: (a) design, (b) research, and (c) knowledge management.

#### **5.5.1.2 Option Two**

In the second program orientation option, first-professional undergraduate and masters degree programs would focus on interior design, post-professional masters programs would focus on knowledge management, and Ph.D. programs would focus on research. There are two important reasons why this option is the least preferred.

Firstly, if both first-professional undergraduate and first-professional masters degree programs focus on interior design, then there would be little distinction between the two degrees. This is a problem that some practitioners believe exists presently. White and Dickson (1994) explained that one of the reasons why practitioners believe there is little distinction between the two programs is that students in first-professional masters programs tend to produce creative design projects that are similar to the senior or capstone projects completed by students in first-professional undergraduate programs. The only difference is that first-professional masters students may place more emphasis than undergraduate students on making their projects more evidence-based. White and Dickson posed this important question: “. . . what is the message to a practitioner about the value of graduate education when the recipient of a first-professional master’s degree enters the marketplace with little, if any, distinction in qualifications from the undergraduate first-professional degree recipient?” (p. 33).



Secondly, if post-professional masters degree programs focus on knowledge management rather than on research, then it reduces the number of programs focused on research. With minimal enrollment in Ph.D. programs and the small number of Ph.D. programs in existence, there would be fewer individuals available to generate the body of knowledge needed within the profession.

## **5.5.2 Discussion**

### **5.5.2.1 Potential Criticisms of the Knowledge Management Program**

Despite the potential benefits of the knowledge management program, there are three possible criticisms that some stakeholders may make. Firstly, some stakeholders may consider the program to be too radical or inappropriate because it proposes an entirely new curriculum for the first-professional masters program that is neither on research or design, exclusively. Despite these reservations, the need for radical change within interior design education has been identified. Thompson and Guerin (2002) wrote, "We must question and investigate our approach to Interior Design education to ensure the future of Interior Design practice in the 21st-century" (p. 8).

Secondly, some stakeholders may criticize the knowledge management program because it may seem too far outside the boundaries of traditional interior design education. However, given the fact that some firms have already established ad hoc knowledge management positions by hiring people with masters degrees in psychology or business management, clearly the need for knowledge managers exists (PPP 2, 11, 12).

Thirdly, some interior design educators and administrators might argue that the knowledge management

program should be housed within some discipline other than interior design. Since knowledge managers need a strong understanding of interior design, however, the program needs to be situated within the context of interior design education. Knowledge managers need to be exposed to and understand the culture -- the beliefs, attitudes, and behaviours -- of interior design in order to be effective knowledge managers within that profession.

#### **5.5.2.2 Considerations for Post-Secondary Educators**

The knowledge management program presents numerous challenges for any institution considering implementing the strategy. In order to determine whether or not the knowledge management program is a viable option for an institution, educators at that institution would need to re-examine their existing curriculum, review university and departmental mandates, assess available resources, and evaluate the potential student population to determine whether either of the program orientation options described earlier are desirable, necessary, or possible.

Ideally, all four program types (first-professional undergraduate, first-professional masters, post-professional masters, and Ph.D.) would be offered at every educational institution. This would allow individuals in the three cultures advocated in the Framework to begin to work together, and to appreciate the expertise of one another. These experiences would provide students with exceptional preparation for professional practice. Realistically, however, many institutions may only be able to focus on one or two program types. Even if the knowledge management program cannot be offered at some institutions, just knowing that other institutions may be offering such a program could cause educators to re-focus their own curricula so that they focus specifically on interior design or

research. Such adjustments would help the profession as a whole because the qualifications of graduates from each program type would be consistent.

In addition to practical considerations that educators would need to take into account, philosophical considerations might require attention as well. Philosophically, educators may need to discuss the degree to which they believe that their particular programs should serve the needs of the profession or the needs of the discipline. In serving the needs of the profession, applied research is important and would be promoted through the adoption of the knowledge management program. In serving the needs of the discipline, basic research is important and would be promoted through the existence of post-professional masters and Ph.D. programs. Again, although educators may wish to offer a full range of programs and, therefore, support both the profession and the discipline, limited resources may prevent educators from doing so. A discussion of philosophical alliance is, therefore, critical.

In addition, educators would probably need to consider the question of generalization versus specialization. The Theoretical Framework described here promotes specialization in three distinct areas. If stakeholders do not support specialization, then they will likely support the generalist approach in which the designer and researcher are amalgamated into one culture, such as design research. As such, these educators may not see the need for the knowledge management program.

SSHRC (2004) wrote in their re-structuring document, "Radical change in the rest of the world calls for a willingness to consider radical measures. SSHRC must contemplate major transformations in order to engage the

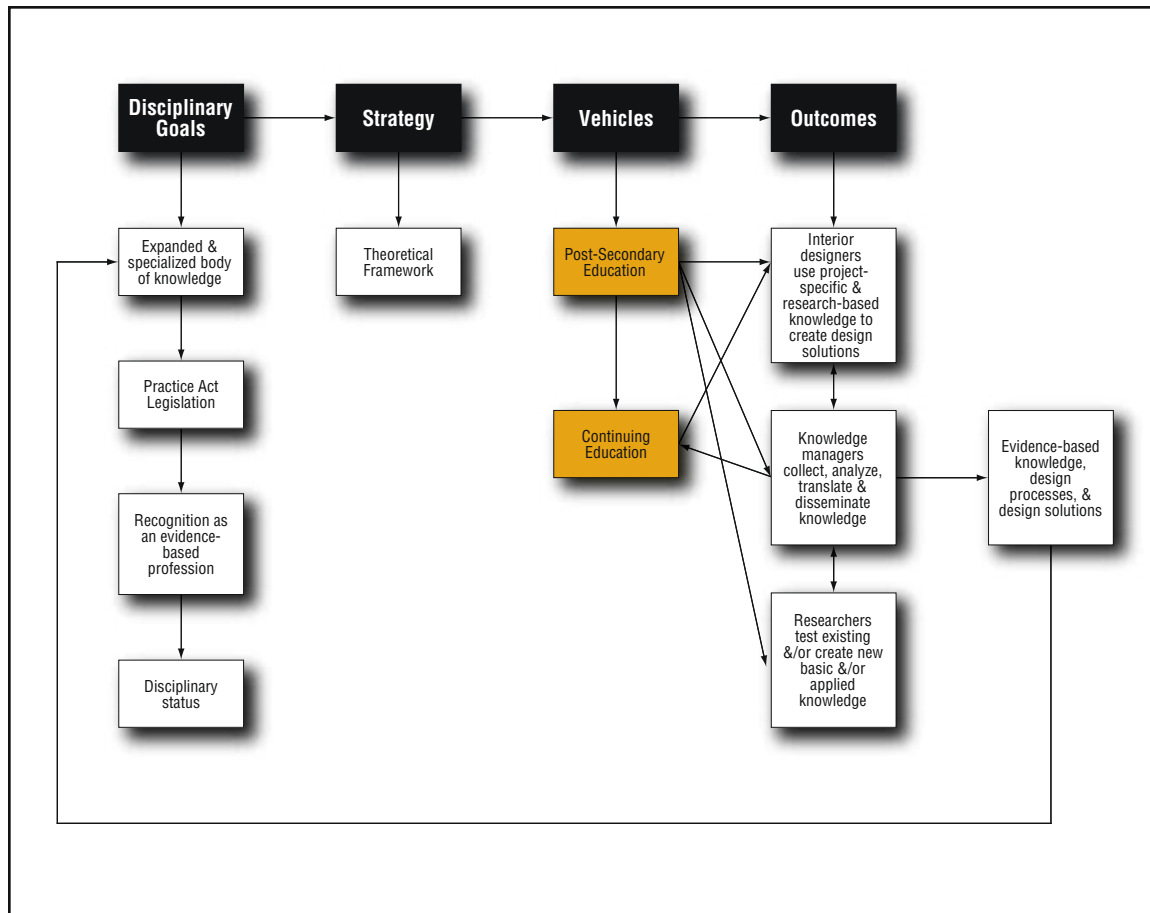
full range of stakeholders and satisfy the nation's growing needs for knowledge and skills" (p. 10). Interior designers should also contemplate major transformation of their discipline in order to engage the full range of stakeholders in conducting, using, translating, disseminating, and valuing research in interior design. The Theoretical Framework for Research in Interior Design provides educators with an approach for re-thinking post-secondary education programs so that just such a transformation can take place. Education, after all, is the primary vehicle through which the Theoretical Framework for Research in Interior Design would be implemented.

### **5.5.2.3 Education: The Vehicle For Implementation**

Figure 15 (p. 214) depicts the linkages between interior design's disciplinary goals, the strategy and vehicles for attaining those goals, and outcomes. As indicated, education will play a critical role in helping the profession attain its goals because it is through education that future practitioners will be trained and indoctrinated into the overall culture of their profession, and into the unique culture of their chosen area of specialization whether it be design, research, or knowledge management.

Figure 15 shows that there are at least two types of education through which the Theoretical Framework can be delivered. How the Framework would be implemented through the first type, post-secondary education, has been discussed already. Worthy of note, however, is the potential for continuing education to play an important role in helping interior design achieve its disciplinary goals.

As discussed earlier in this Chapter, because knowledge managers would be trained, in effect, to act as teachers, they would be qualified to deliver distilled, evidence-based knowledge to practitioners through



**Figure 15 – Disciplinary Goals, Strategy, Vehicles, and Outcomes**

continuing education courses. Having knowledge managers provide continuing education courses would address the concerns that some participants in this study had about the lack of rigour in continuing education (EIP 4, PPP 12). In addition, having knowledge managers deliver continuing education courses would enable designers at small firms, who could not afford to have a knowledge manager on staff, to benefit from the expertise that knowledge managers have to offer.

Quite simply, without post-secondary education, there is no other means by which to educate individuals about interior design, research, or knowledge management, or to indoctrinate them into those unique cultures. Without rigorous continuing education, there is no consistent, wide-spread means (other than the Internet) for enabling all practitioners, not just those who work at firms where knowledge managers would be employed, to be aware of current and emerging evidence-based knowledge. As NCIDQ (n.d.) asserts, education is the first step in the “career path” toward becoming a qualified, professional interior designer. Education is also the first step toward becoming a qualified knowledge manager or researcher.

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## Notes

1. This has certainly been my experience when asking some first-professional masters students to generate a research-based design practicum. Throughout the duration of the practicum, some students were never quite certain about whether they should be acting as researchers or designers.



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## Chapter Six

### Summary



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A growing number of interior design stakeholders believe that increased levels of research will lead to an expanded and specialized body of knowledge, professional recognition, disciplinary status, and legitimization and sustainability of the profession. These individuals believe that research will enable the profession to become recognized as being evidence-based rather than art-based.

Despite the potential importance of research, few strategies exist for how it can play an effective role within the profession. What exists, instead, are vague suggestions that more research be conducted, that more graduate programs be offered, or that design and research merge to form a hybrid called “design research.” These suggestions do not constitute a specific strategy for making research a more dominant part of the profession, and have not been effective to date. Evidence of their ineffectiveness lies within the persistent criticisms in recent literature that the profession remains art-based rather than evidence-based.

#### **6.1 SUMMARY OF THE STUDY**

Given the potential importance of research within the profession, the purpose of this study was to investigate



the nature and purpose of research in interior design. The objectives were to develop a theoretical framework for research in interior design, and to describe the implications of the framework for post-secondary interior design programs in Canada and the United States. The framework was meant to provide a strategy for effectively incorporating research into interior design, and to provide interior design educators, specifically, with information about how they could utilize the strategy as the basis for program development or curriculum planning.

The qualitative study was based on a triangulated research design that included: (a) semi-structured telephone interviews with 29 participants (11 from educational institutions, 14 from professional practice, and 5 from professional organizations), (b) the collection of documents from all study participants, and (c) a case study, conducted over a five day period, within a professional practice firm in the United States. During the case study, unstructured interviews were conducted with eight participants, documents were collected, observation and field notes were made, videos and photographs were taken, and a focus group was conducted with 11 participants.

The study findings provide insight into educators', practitioners', and members' of professional organizations perceptions about research in general, and about research in interior design specifically. Key findings suggest that interior design educators and some graduate students think of research as a formal process used to generate new, or test existing, knowledge, and to contribute to the profession's knowledge base. Practitioners, undergraduate, and some graduate students think of research as an informal process used to gather project-specific information. Another important finding was that educators, graduate students, and

researchers tend to focus on basic or theoretical research topics which practitioners find difficult to understand and consider irrelevant to practice.

The findings in this study are consistent with those of Dickson and White's (1993), who found that educators and practitioners "speak different languages." This lack of communication and the inability of practitioners to understand formal research are two of the main reasons why practitioners tend not to base their design decisions on research and, instead, rely on their education, past experience, intuition, and expert consultants as primary sources of information.

With participants' perceptions about research ascertained, one of the primary research objectives of the study was met. In order to develop the Theoretical Framework for Research in Interior Design, however, further analysis was necessary. Such analysis would lead to a Framework that was more than just a descriptive account of the nature of research in interior design. The key form of analysis that took place was the generation of what was called a "Synoptic of Themes."

The Synoptic of Themes was created by amalgamating important ideas from the literature, participants' perceptions about research in interior design, additional themes from the data, and theoretical memos made throughout the data collection and analysis phases. The eight themes that emerged provide insight as to why it has been so difficult for interior design to establish a widespread research culture. The themes indicated that:

1. The lack of resources available makes it difficult for interior designers and/or interior design researchers to develop sustainable research agendas.

2. The lack of research relevant to practice does little to convince practitioners of the importance of research and, thereby discourages them from being involved in research. The lack of research relevant to practice also makes it difficult for practitioners to convince clients that design solutions are evidence-based.

3. Limited opportunities for access and publication makes it difficult for researchers to disseminate their work widely, and makes it difficult for practitioners to access research.

4. The inability or lack of motivation for designers and/or researchers to translate basic research into applied knowledge prevents practitioners from being able to utilize research to inform their decision-making processes.

5. Poor communication and linkages between designers and researchers may account for, in part, the lack of relevant research within the profession.

6. Disagreement about whether or not a distinct body of knowledge is necessary for the profession creates uncertainty for researchers about the kinds of research they should undertake, or whether original research is needed at all.

7. The range of perceptions that stakeholders have about interior design means that not all stakeholders are committed to, value, or see the need for research.

8. Research can help increase stakeholders' perceptions about the value of interior design only if research can be applied to situations or problems that stakeholders consider to be important.

These eight themes led to the conclusion that in order for research to become a more significant part of the interior design profession, there needed to be a stronger, more developed research culture: a culture that not only

academics and researchers would acknowledge, but that practitioners would acknowledge and embrace as well.

At the same time, it became clear that if interior design was to continue to provide context-specific, uniquely creative spatial solutions, then it would be critical for the profession to maintain its long-established design culture. Replacing or minimizing the design culture with a research culture would result in confusion about processes, alienation of designers whose interests and motivation are in design not in research, and sacrificing the history and foundational strength of the profession.

It was clear that promoting more research, demanding designers to be more like researchers, or requiring designers to be aware of research would not result in the kind of integration between design and research that seemed necessary. In other words, doing more research and having designers understand research would not guarantee that the profession would gain recognition as an evidence-based profession.

It was upon these conclusive statements and the Synoptic of Themes that the goals for the Theoretical Framework were established. The Theoretical Framework for Research in Interior Design needed to: (a) establish distinct design and research cultures, (b) establish a third culture that could mediate between the design and research cultures and enhance communication between all interior design stakeholders, and (c) promote relevant research.

Consistent with the general characteristics of theoretical frameworks (Camp, 2001; Fawcett, 1998; Strauss & Corbin, 1998), the Framework explains who, what, when, where, why, how, and with what consequences research in interior design could be conducted, translated, used, and disseminated. The Framework goes further, however, in that

it describes three unique cultures: (a) design, (b) research, and (c) knowledge management.

The design culture described in the Theoretical Framework is consistent with current design theories of interior design (Pile, 2003) and, as such, promotes human-centered, ethical, and creative design using subjective and intuitive processes. The interior design culture does not promote formal research.

The research culture described in the Framework is consistent with formal research as described by Jackson (1999) and Bogdan and Biklen (2003). As such, it promotes the testing of existing, or the generation of new, knowledge through rational and objective processes, but does not promote the translation of research into languages or formats that are easier for non-researchers to understand.

The knowledge manager described in the Framework is based loosely on the work of Reich (1992) and authors in the discipline of management (Firestone & McElroy, 2003). The culture of knowledge management could be described as that in which knowledge managers are trained to value communication between interior design stakeholders, utilize multi-analytic and interpretive procedures to analyze and translate information, and capitalize on multiple means of communication in order to disseminate transformed information to stakeholders both within and outside the profession.

By promoting each culture as a distinct entity, the intent was that each culture would be recognized for its specialized knowledge, attitudes, beliefs, values, and behaviours and processes. This balance of distinct, but interconnected, cultures was needed in order for interior design practice to function in ways consistent with its operational definition. This definition asserts that interior

design practice is *a service industry in which the goal is to produce, in ways that are ethical, effective, and efficient for both clients and designers, context-specific, evidence-based, uniquely creative spatial solutions to meet both client and end user needs.*

The study suggests that first-professional undergraduate programs should focus on interior design, first-professional masters programs should focus on knowledge management, and post-professional masters and Ph.D. programs should focus on research. For educators, these suggestions could mean that new programs (i.e., knowledge management) needs to be developed, and/or that existing programs need to be re-assessed or re-focused.

Since the knowledge management program would require multi-disciplinary education (e.g., interior design, research, management or business, communication), some interior design educators and administrators might argue that such a program should be housed within some discipline other than interior design. The assertion in this study, however, is that because knowledge managers need a strong understanding of interior design, the knowledge management program needs to be situated within the context of interior design education. Knowledge managers need to be exposed to and understand the culture (the beliefs, attitudes & behaviours) of interior design in order to be effective knowledge managers within that profession.

## **6.2 BENEFITS OF THE FRAMEWORK**

The benefits of the Theoretical Framework for Research in Interior Design include the following:

1. It promotes a balance of the three distinct, but interconnected, cultures of design, knowledge management,

and research. This array and balance of cultures provides students, educators, and employers with a range of educational program and outcome options.

2. It promotes a balance between generating, transforming, and using knowledge which benefits and balances the research needs of the discipline as a whole.

3. It provides an opportunity for first-professional masters programs, which have been criticized for their perceived lack of purpose, to have a clear and specific focus.

The Framework is also beneficial because it addresses each of the issues identified in the Synoptic of Themes. By addressing these issues, the Framework provides potential solutions to critical factors that were considered to be problematic in terms of developing a widespread research culture within the interior design profession. With the adoption of the Framework strategy:

1. Financial resources for research could potentially be increased by knowledge managers' consistent linkages with industry, practice, clients, government, and professional organizations. Also, with the existence of relevant research promoted by the Theoretical Framework, external stakeholders would potentially be more willing to fund research in interior design.

2. Knowledge managers could promote the generation of relevant research in interior design because they would have first-hand knowledge of issues that are important to designers, clients, end users, and other stakeholders within the profession. They would also be able to relay these issues to researchers.

3. Access to, and dissemination of, research could be improved because knowledge managers would disseminate information to a wide range of stakeholders both within and outside the profession.

4. Knowledge managers could translate research and communicate it to practitioners and students in languages and formats that practitioners and students could understand and utilize.

5. Knowledge managers could facilitate increased levels of communication and better linkages between interior design stakeholders, particularly between designers and researchers, but also between clients, end users, and researchers; and between practice and education.

6. Research from other disciplines could be translated and applied to interior design by knowledge managers. Or, original research for the body of knowledge could be generated by researchers internal to the profession.

7. Stakeholders would have numerous options about how to perceive interior design. Traditional views of interior design as an art-based profession would be balanced against radical interpretations of it as a science-based profession, and could, ultimately, be mediated by the perception of interior design as a hybrid that encompasses both art and science.

8. The value for the profession, as a whole, could increase because the Framework promotes relevant research, research-based design solutions, a balance between basic and applied research, and a high degree of communication between all interior design stakeholders.

In short, the Framework for Research in Interior Design meets its established goals because it: (a) includes distinct cultures, (b) enhances communication between cultures and stakeholders, and (c) promotes relevant research. In addition, the Framework provides a strategy for how research can not only be generated in interior design, but also utilized in the design process and incorporated more holistically into both the practice and education facets



*“I think one interesting thing that seems to be lacking is the ability, as a design community, to lift up our profession to the level of other professions [so] that we’re more research-based -- like medicine or like product design, for example. If we had the ability to travel, to go to seminars, to exchange ideas on an international level with other designers -- if that kind of environment kind of percolated or existed, then I think that what would result would be much more fruitful products or projects” (CSP 6).*

of the discipline.

The Framework provides a way for designers to do what they do best: design, and for researchers to do what they do best: research, by eliminating pressure on these individuals to be and do something for which they were not trained. The findings assert that the design, knowledge management, and research cultures will enable interior designers to not only achieve their evolutionary goal of becoming recognized as an evidence-based profession, but also to maintain the profession’s rich history of providing uniquely creative, human-centered spatial solutions.

Given the increasingly complex nature of the interior design profession, the need for a knowledge management educational program exists. In fact, some design firms have already developed a grassroots form of knowledge management by hiring designers who are trained in other disciplines as well. These firms are using these cross-trained individuals in order to extend the range of services that they are capable of providing.

### **6.3 RECOMMENDATIONS FOR FURTHER RESEARCH**

Throughout the study, numerous topics arose which provide insight into areas where further research is needed. First, further research is needed to test the Theoretical Framework. Perhaps a large-scale empirical study could be undertaken to ascertain stakeholders’ attitudes and perceptions about the Theoretical Framework. Such a study could produce the kind of evidence needed in order to generalize the study findings to a larger population, and to enable the evolution of the Framework from the level of substantive to practice theory.

A second area for further investigation could be in the area of curriculum content for the knowledge management program. A study of curriculum content, through further exploration of the knowledge management theory, would provide educators with more detailed information than is provided in this dissertation. A particularly important area in the knowledge management curriculum that requires investigation is the analytic skills necessary for the knowledge manager. Indeed, how would knowledge managers actually transfer research from one language to another? Further research is needed about how written information is interpreted, transformed, and applied to built physical form.<sup>1</sup>

A third area of research needed concerns the link between perceptions about the value of interior design and relevant research. What kinds of topics do stakeholders believe need to be researched? What kinds of topics would cause external stakeholders to value interior design to a greater degree than they do presently? Answers to these questions could contribute important information to the interior design discipline's quest for increased recognition, disciplinary status, and legitimization and sustainability of the profession.

*Industry does research that is more relevant to practice because "its research based on what our clients are looking for not what our industry's looking for. And maybe that's the other significant shift to focus [on] so that its not just us kind of justifying our existence. Instead, its going to our clients and asking them what they need" (PPP 6).*

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## Notes

1. Only one reference was found in the literature in which the author makes reference to the process of translating research to design (Zeisel, 1975). Based on a human behaviour research approach, Zeisel wrote that the translation process requires designers to:
  1. Set overall design and social objectives for the project
  2. Identify and create images of salient social issues
  3. Find specific behavioral indicators which describe the issues

4. Identify general design concepts which respond to the social issues
5. Describe possible specific design responses which develop the design concept and accommodate the specific behavioral needs uncovered by the research (p. 31).

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# Appendix A



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## Protocol for Contacting Potential Interview Participants



Research in Interior Design

**A Conceptual Framework for Research in Interior Design:  
Implications for Post-secondary Interior Design Education in Canada and the United States**

Appendix B: Protocol for Contacting Potential Interview Participants

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Hi name of potential participant. My name is Cynthia Karpan. I'm an Assistant Professor in the Department of Interior Design, and Ph.D. student in the Faculty of Education at the University of Manitoba in Winnipeg, Manitoba, Canada. Currently, I am working on my Ph.D. dissertation and would like to discuss it with you if that's possible. I was wondering if now might be a convenient time for me to explain further, or if I should call back at another time.

**Do you have a few minutes so that I can explain why I'm calling?**

**Yes**      Continue

**No**      "Is there a more convenient time that I could call back?"  
Call back at/on \_\_\_\_\_

If not interested at all, then state, "I was hoping to speak with someone who is an interior designer and who has been with the institution, firm, organization for at least five years. Is there someone else I could speak to?"

Person's name \_\_\_\_\_  
"Great. Thank you very much for your time."

Great! Tentatively, my study is called "A Conceptual Framework for Research in Interior Design: Implications for Post-secondary Interior Design Education in Canada and the United States". Basically, I am attempting to get a better idea about the nature of research in interior design – how research is used, how it is conducted, what kinds of research are needed, and so on. The results of the study may help educators plan programs, curricula, and courses that take into account the nature of research in interior design.

I am calling to ask if you would be willing to participate in this study by allowing me to conduct an interview with you. Before you answer, let me explain what would be involved!

- First, I would want to conduct at least one telephone interview with you. The interview would take no more than about an hour and a quarter, and would be done, of course, whenever it is most convenient for you – weekdays, evenings, weekends – whatever time suits you best. Primarily, I would be asking you to act as a **spokesperson** for your institution, firm, organization – simply reporting on, if you will, the kinds of research-related activities that occur in your organization. So, the questions I would be asking you would **not** be about you personally. Also, I would send you the questions in advance so that you would have time to think about your responses.
- Second, I **might** need to conduct up to two more **short** interviews with you. The purpose

## Research in Interior Design

of these interviews would be to clarify or confirm issues from the first interview. Likely, the follow-up interviews would take no more than half an hour each – again, if required. If possible, I would like to tape record all interviews – mainly so that I don't miss any of the details of our conversation.

- Third, I would need you to send me a few documents that I could use for content analysis. These might include, for example, time sheets showing how much time employees spend on research or related activities, research documents produced by your institution, firm, organization, etc..
- And last but not least, I would need you to complete a consent form and a short profile questionnaire and return them to me before the interview takes place. The questionnaire would require only about 10 minutes to complete, would help me understand your background, and would allow us more time for the interview.

I am very excited and enthusiastic about the study, and would like, very much to be able to conduct an interview with you. Of course, your participation would be voluntary, and any information that you provide would be confidential. In addition, I plan to use a pseudonym to protect your identity, and plan to have all participants review portions of the dissertation before submitting it to my Ph.D. committee.

**Do you think that you would you be willing to participate, voluntarily, in the study?**

- Yes** Continue
- No** Terminate the call by stating, "I understand. Thank you very much for your time and consideration. Can you recommend another interior designer in your institution, firm, organization who might be able to participate in this study? This person must have been employed at the institution, firm, organization for at least five years."
- Yes** Name of person \_\_\_\_\_
- No** "Well, thanks again for your time".

Great! I will send you a package with further details about the study, the interview questions, the profile questionnaire, and the consent forms. Can I have or confirm your address so that I can send you the package?

Street/PO Box \_\_\_\_\_  
 City/State/Zip Code \_\_\_\_\_  
 Office Tel \_\_\_\_\_ Office Fax \_\_\_\_\_  
 Home Tel (Optional) \_\_\_\_\_ Cell \_\_\_\_\_  
 Email \_\_\_\_\_ Web \_\_\_\_\_

I understand that after you receive the package, you may have some questions. I will include in the package, contact numbers for both myself and my Ph.D. advisor, Dr. Seifert. Thank you for your time. I appreciate your interest in my study and look forward to our interview.

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## Appendix B



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Interview Participants' Information Package:  
Cover Letter, Interview Questions, Document Request List,  
Profile Questionnaire, Preferred Interview Time,  
Study Results Request, and Consent Form



UNIVERSITY  
OF MANITOBA

Faculty of Architecture

Department of Interior Design  
Winnipeg, Manitoba, Canada  
Telephone (204) 474-9386  
Fax (204) 474-7533

July XX, 2003

Mr., Mrs., Ms, Professor, XXX  
123 XX Street, Avenue  
City, Province/State  
Postal/Zip code  
Country

**Dear name of participant:**

As promised during our telephone conversation on insert date of conversation, I am forwarding to you this package of information about my research study. The study, as you know, is tentatively called "A Conceptual Framework for Research in Interior Design: Implications for Post-secondary Interior Design Education in Canada and the United States". The study is being conducted for my Ph.D. dissertation in the Faculty of Education at the University of Manitoba in Winnipeg, Manitoba, Canada.

The purpose of the study is to gain insight into the nature, purpose, and role of research in interior design. The conceptual framework resulting from the study may help interior design educators in Canada and the United States create programs, curricula, and courses that take into account the nature of research in interior design. Data for the study will be collected by conducting interviews with, and obtaining documents from, 25 individuals – ten from education, ten from practice, and five from professional organizations – and then doing case study research in two practice settings.

For the interviews, It is important for you to know that, other than the demographic profile, I will **not** be asking you personal questions. Instead, I will be asking you to act as a **spokesperson** for your institution, firm, organization, describing the various research-related activities that occur there. Your participation is voluntary, and any information you provide will be kept confidential. Issues of anonymity are explained in the enclosed consent form.

Included in this package are a list of the interview questions, a document request list, a profile questionnaire, a preferred interview time form, a study results request form, and two copies of

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a consent form outlining important issues related to the study. I will need you to **complete the profile questionnaire, the preferred interview time form, and the study results request form (optional), and sign a consent form. Then, I will need you to return all four documents to me prior to conducting the interview.** For your convenience, I have enclosed a return envelope. You may keep, for your records, the interview questions, the document request list, and the second consent form.

Thank you for agreeing to participate in this study. If you find, after reviewing the attached documents, that you do not wish to participate, or that you are unable to participate, please be assured that I understand. At the same time, if you could let me know as soon as possible so that I can make other arrangements.

If you wish, you may confirm the authenticity of this study by contacting Dr. Kelvin Seifert in the Department of Educational Administration, Foundations, and Psychology, Faculty of Education, University of Manitoba. Dr. Seifert is my Ph.D. advisor. His telephone number is (204)474-9859, and his email address is [seifert@cc.umanitoba.ca](mailto:seifert@cc.umanitoba.ca). Also, as I mentioned in our telephone conversation, I am an Assistant Professor in the Department of Interior Design, Faculty of Architecture, University of Manitoba. You may visit the Faculty of Architecture web site at <http://www.umanitoba.ca/faculties/architecture/> to confirm my employment.

Sincerely,

**Cynthia M. Karpan**, Assistant Professor (Interior Design) and Ph.D. candidate (Education)  
Room 216 Architecture Two Building  
Home Tel/Fax: (204)775-7453  
Office Tel: (204)474-6075  
Office Fax: (204)474-7533  
Email: [karpanc@cc.umanitoba.ca](mailto:karpanc@cc.umanitoba.ca)  
Web: <http://www.umanitoba.ca/faculties/architecture>

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**A Conceptual Framework for Research in Interior Design:  
Implications for Post-secondary Interior Design Education in Canada and the United States**

INTERVIEW QUESTIONS

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1. Tell me about how people (employees, faculty, and/or students) in your institution, firm, or organization would **define or describe research**.
2. **When**, and **for what purpose** do people in your institution, firm, or organization **use** research? Please provide an example.
3. What **kinds** of research do people in your institution, firm, or organization use, and **how** do they use it? Please provide an example.
4. Who or what company, organization, institution, or publication **produces, conducts, or publishes** the research or knowledge that people in your institution, firm, or organization use most frequently?
5. What kinds of research do people in your institution, firm, or organization **need**, but currently **do not** have access to?
6. Who or what company, organization, institution, or publication do people in your institution, firm, or organization think **should produce, conduct, and/or publish** the research needed?
7. How should research be made **accessible** to people in your institution, firm, or organization (i.e., literature, world wide web, product representatives, seminars, conferences, trade shows, continuing education, etc.)?
8. Can you give me an **example of research conducted** in your institution, firm, or organization?
  - A. Was this research conducted by one or more individuals? If other people were involved, were they interior designers, architects, or experts from other disciplines?
  - B. Was the research conducted a typical or normal part of what goes on in your institution, firm, or organization, or was it an unusual situation?
  - C. What did your institution, firm, organization or researcher do with the research results?
9. What **facilities and/or resources** does your institution, firm, or organization have to support employees, faculty, and/or students in conducting their research, and are these facilities and/or resources **adequate**? Explain.
10. Besides the topics that we've discussed already, is there anything else that you think I should know about **research-related activities** in your institution, firm, or organization?

**A Conceptual Framework for Research in Interior Design:  
Implications for Post-secondary Interior Design Education in Canada and the United States**

DOCUMENT REQUEST LIST

---

Following is a list of documents that could provide extremely useful data for my study. Please note that the list is not all inclusive, and that not all items on the list need to be sent to the me. Instead, I would appreciate and value greatly whatever documents you have time to collect, and those that you feel comfortable in sharing with me. Also, please be assured that all of the information provided will be kept in the strictest confidence. The information will be used solely for the purpose of content analysis -- helping me discover different ways that individuals, educational institutions, practice firms, and professional organizations describe, understand, utilize, and conduct research in interior design. I have included a self-addressed, stamped envelope for your convenience (should extra postage be required, I will of course reimburse you).

- Examples of research conducted by yourself or by individuals in the place where you work (i.e., published or unpublished documents, articles, reports, white papers, books, conference presentations, programme documents, etc.).
- Course outlines and/or assignments related to research courses.
- Minutes of meetings where research was the central topic of the meeting (i.e., meetings regarding curriculum, tenure and promotion guidelines, company policies, strategic planning, etc.).
- Descriptions or definitions of research used by your institution, practice, or professional organization (i.e., definitions provided to clients in your firm's "scope of work" statements, descriptions written in company or institution policy manuals, mandates, or simply working definitions adhered to by individuals where you work).
- Time sheets describing how much time individuals spend on research or related activities. If sending these documents, please remove employee names.
- Examples of research used by yourself or by individuals where you work (i.e., literature or documents created by product manufacturers or specialized organizations, books or journals consulted regularly by people where you work, etc.). Since it may be impossible to send actual examples of these documents, a brief description of the title, author, date, and place of publication for each source would suffice -- if possible, an abstract of each would be appreciated as well.



**A Conceptual Framework for Research in Interior Design:  
Implications for Post-secondary Interior Design Education in Canada and the United States**

PROFILE QUESTIONNAIRE

In order to help me understand your background, please complete the following questionnaire and return it to the Principal Researcher in the envelope provided.

Name \_\_\_\_\_ Inst./Firm/Org. \_\_\_\_\_

**1. Currently, what is your job title, and what are your main responsibilities?**

Title	Responsibilities

**2. What is your educational history?**

Level	Degree/s	Date of Graduation	Institution
Undergraduate			
Masters			
Ph.D.			

**3. What has been your practice experience in interior design or related areas?**

Firm and address	Position	Dates of employment	Type of projects

**4. What has been your teaching experience in interior design or related areas?**

Institution and address	Position	Dates of employment	Courses Taught

**A Conceptual Framework for Research in Interior Design:  
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PREFERRED INTERVIEW TIME

Please indicate the date and time that you would prefer to be interviewed by telephone. Although every effort will be made to accommodate your preference, in the event that your preferred time is not possible, please indicate an alternative time as well. Please return this form to the Principal Researcher in the envelope provided.

Name \_\_\_\_\_

Institution, firm, organization \_\_\_\_\_

I would prefer to be interviewed on \_\_\_\_\_ at \_\_\_\_\_ am/pm  
date time

An alternative interview time is \_\_\_\_\_ at \_\_\_\_\_ am/pm  
date time

The telephone number I can be reached at for the interview is \_\_\_\_\_

**A Conceptual Framework for Research in Interior Design:  
Implications for Post-secondary Interior Design Education in Canada and the United States**

STUDY RESULTS REQUEST (OPTIONAL)

---

If you wish to receive a summary of the study results, then please complete this form, and return it to the Principal Researcher in the envelope provided.

- Yes, I would like to receive a summary of the study results (available approximately October, 2005).

Please indicate the address where you would like the summary to be sent.

Name \_\_\_\_\_

Street/PO Box \_\_\_\_\_

City/State/Zip Code \_\_\_\_\_



UNIVERSITY  
OF MANITOBA

Faculty of Architecture

Department of Interior Design  
Winnipeg, Manitoba, Canada  
Telephone (204) 474-9386  
Fax (204) 474-7533

<b>Research Project Title</b>	A Conceptual Framework for Research in Interior Design: Implications for Post-secondary Interior Design Education in Canada and the United States
<b>Principal Researcher</b>	Cynthia M. Karpan, Ph.D. candidate Faculties of Graduate Studies and Education, University of Manitoba Tel: (204) 474-6075      Email: karpanc@cc.umanitoba.ca
<b>Ph.D. Advisor</b>	Dr. Kelvin Seifert Department of Educational Administration, Foundations, and Psychology, Faculty of Education, University of Manitoba Tel: (204) 474-9859      Email: seifert@cc.umanitoba.ca

This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

#### Research purpose

To develop a conceptual framework for research in interior design, and to discuss the implications of such a framework for post-secondary interior design education in Canada and the United States. To develop the framework, this research study has been designed to obtain information from numerous participants about research-related activities that occur in interior design educational, practice, and professional organization settings.

#### Procedures

Participants will fill out a profile questionnaire which will take approximately 10 minutes to complete. Participants will return the profile questionnaire, the preferred interview time form, the study results request form (optional), a signed consent form, and a few documents (see Document Request List) to the Principal Researcher prior to the interview date. A stamped, self-addressed return envelope will be provided.

Participants will partake, voluntarily, in a semi-structured, open-ended interview via telephone. The interview will take no more than 75 minutes to complete. If required, participants will participate in up to two additional interviews, requiring no more than 30 minutes each. All interviews will be

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conducted at a time convenient for participants. All participants will be provided with a copy of the interview questions prior to the interview taking place.

**Risk**

Completing the consent form and profile questionnaire, and participating in the interview/s presents no risk to participants.

**Recording Devices and Original Data**

All interviews will be recorded on cassette tape and then transcribed verbatim either by the Principal Researcher or by a professional transcriber. The original cassette recordings and transcriptions will be kept by the researcher for a period of 10 years after which time the cassette tapes will be erased as will the discs and/or hard drive/s containing the transcribed interviews. Consent forms, hard copy information about participants, and any documents provided by participants will also be shredded and disposed of after a period of 10 years.

**Anonymity and Confidentiality**

Two measures will be taken to ensure anonymity. First, pseudonyms will be used throughout the entire dissertation. Pseudonyms will be used for individual participants, educational institutions, practice firms, organizations, and geographic locations. Second, a rigorous member check process will take place in order to ensure that all participants are satisfied with the accuracy of information provided and/or with descriptions rendered of them or their institution, firm, or organization.

Member checks with **all participants** will occur by asking each participant to review all portions of the dissertation pertaining to them. Participants will have one week to review the material to ensure that descriptions of them and their affiliated organizations are disguised to their satisfaction, and that statements made about them are accurate and fair. Participants will forward their feedback to the Principal Researcher who will then make any revisions necessary. Negotiations will continue until all participants and the Principal Researcher are satisfied with the accuracy and fairness of wording and phrases used to describe participants, their activities, and their affiliated institution, firm, or organization. In the event that participants cannot be satisfied fully, some portions of the dissertation may need to be eliminated (a situation that could result in important descriptions being eliminated from the dissertation, but one in which the Principal Researcher is willing to engage in order to ensure that participants are satisfied with the way they will be represented).

All information provided by study participants will be kept in the strictest confidence. No person other than the Principal Researcher, her advisory committee (Dr. Kelvin Seifert, Dr. Lynn Taylor, Dr. Marcella Eaton, and Professor Nancy Maruca), and a professional transcriber will be allowed access to the original data, transcripts of data, or any material in which participants' identities are revealed. Members of the Principal Researcher's Advisory Committee may view the original data and transcriptions for the sole purpose of ensuring that the Principal Researcher's interpretations of the data are accurate.



Research in Interior Design

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**Feedback**

All participants will have the opportunity to receive a summary of the research findings. The summary will be available once the study has been approved by the Principal Researcher's Advisory Committee, the Faculty of Education, and the Faculty of Graduate Studies at the University of Manitoba (approximately October, 2005).

**Dissemination of Results**

Participants are aware that the results of the study will constitute a Ph.D. dissertation in education. As such, the dissertation will be available in the library collection at the University of Manitoba. Additionally, the researcher may publish articles or books, or make presentations about the research findings at conferences, symposia, or other similar events. Participants grant permission to the Principal Researcher to publish, disseminate, discuss, and present the study results for academic and scholarly purposes so long as the guidelines for anonymity and confidentiality (as described here) are respected.

---

Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researchers, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from the study at any time, and/or refrain from answering any questions you prefer to omit, without prejudice or consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation.

This research has been approved by the University of Manitoba Education/Nursing Research Ethics Board. If you have any concerns or complaints about this project you may contact any of the above-named persons or the Human Ethics Secretariat at (204) 474-7122. A copy of this consent form has been given to you to keep for your records and reference.

Name of participant (please print) \_\_\_\_\_

Institution, firm, organization \_\_\_\_\_

\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Cynthia M. Karpan, Principal Researcher

\_\_\_\_\_  
Date

\_\_\_\_\_  
Dr. Kelvin Seifert, Ph.D. Advisor

\_\_\_\_\_  
Date

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# Appendix C



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## Interview and Focus Group Guide



Research in Interior Design

**A Conceptual Framework for Research in Interior Design:  
Implications for Post-secondary Interior Design Education in Canada and the United States**

Appendix D: Interview and Focus Group Guide

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*Question to determine **how people** in the program, firm, or organization **understand research**.*

1. Tell me about how people (employees, faculty, and/or students) in your institution, firm, or organization would **define or describe research**.  
Probe:
  - In general, what do most people at your firm think research is?
  - Is there anyone who has a view of research that is **different** from most people who work or study in your institution, firm, or organization? Do you think that I could have the name of that person? \_\_\_\_\_ (this question could be important in terms of finding "negative cases". If necessary, this individual may be contacted for an interview.)

*Questions to determine the **purpose, types, and sources of research used in interior design**.*

2. **When**, and for **what purpose** do people in your institution, firm, or organization **use** research? Please provide an example.  
Probe:
  - During the beginning phases of a design project, throughout complex or unusual projects, to understand unusual or unknown aspects of a project (i.e., healthcare issues, workplace issues, human behaviour issues), to understand building code issues, etc..
  - Are there times when people use different types or amounts of research? Explain.
3. What **kinds** of research do people in your institution, firm, or organization use, and **how** do they use it? Please provide an example.  
Probe:
  - Literature from related industries; libraries; research reports from governments, organizations, universities, or academic journals; magazines; conferences or trade shows; by reading and synthesizing information; by citing information in reports and programme documents; by pointing out information to clients.
4. Who or what company, organization, institution, or publication **produces, conducts, or publishes** the research or knowledge that people in your institution, firm, or organization use most frequently?

## Research in Interior Design

*Questions to determine **research needs and sources** of needed research.*

5. What kinds of research do people in your institution, firm, or organization **need**, but currently **do not** have access to?  
Probe:
  - Research on certain topics such as human behaviour, sustainable design, the value of design, post-occupancy evaluations; applied research (research that is easy to apply directly to design i.e., design guidelines, principles); theoretical research, etc..
6. Who or what company, organization, institution, or publication do people in your institution, firm, or organization think **should produce, conduct, and/or publish** the research needed?  
Probe:
  - Related industries, universities, researchers in environmental psychology, social scientists, professional interior design organizations, etc..
7. How should research be made **accessible** to people in your institution, firm, or organization (i.e., literature, world wide web, product representatives, seminars, conferences, trade shows, continuing education, etc.)?

*Questions to determine **research undertaken, conducted or produced** in education, practice, and professional organizations*

8. Can you give me an **example of research conducted** in your institution, firm, or organization?
  - A. Was this research conducted by one or more individuals? If other people were involved, were they interior designers, architects, or experts from other disciplines?
  - B. Was the research conducted a typical or normal part of what goes on in your institution, firm, or organization, or was it an unusual situation?
  - C. What did your institution, firm, organization or researcher do with the research results?  
Probe:
    - Used results to complete a specific design project, convince clients, publish article/s, graduate, promotion, etc..
9. What **facilities and/or resources** does your institution, firm, or organization have to support employees, faculty, and/or students in conducting their research, and are these facilities and/or resources **adequate**? Explain.  
Probe:
  - Literature libraries, product libraries, experimental laboratories, assembly areas, quiet work areas, computer and other technologies, etc..

*Concluding question and **opportunity to add additional information.***

10. Besides the topics that we've discussed already, is there anything else that you think I should know about **research-related activities** in your institution, firm, or organization?



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## Appendix D



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Case Study Employer Information Package:  
Cover Letter/Employer Consent Form, Pre-visit Information  
Requirements, Itinerary, Focus Group Guide,  
and Participant Consent Form



UNIVERSITY  
OF MANITOBA

Faculty of Architecture

Department of Interior Design  
Winnipeg, Manitoba, Canada  
Telephone (204) 474-9386  
Fax (204) 474-7533

October XX, 2005

Mr., Mrs., Ms., Dr. John Doe  
123 Elm Street  
University  
City, State, Zip code

**Dear Principal/Partner :**

I am writing to ask about the possibility of your design firm and interior design employees participating in a study called "A Conceptual Framework for Research in Interior Design: Implications for Post-secondary Interior Design Education in Canada and the United States". The study is being conducted for my Ph.D. dissertation in the Faculty of Education at the University of Manitoba in Winnipeg, Manitoba.

The purpose of the study is to gain insight into the nature, purpose, and role of research in interior design. The conceptual framework resulting from the study may help interior design educators in Canada and the United States plan programs, curricula, and courses that take into account the nature of research in interior design.

During the first part of my study, I conducted 25 interviews with, and collected documents from, individuals from interior design educational institutions, practice firms, and professional organizations. Now, for the second part of my study, I am planning to conduct case study research at two professional practice firms -- yours and one other one. I selected each firm because of its fine reputations, and because of the range of services it provides.

During the case study I would need to visit your firm for 10-12 consecutive days (12 days if there are participants working over the weekend). While on site, I would want to attend meetings; casually talking to interior design employees, make observations and field notes, collect documents, and record as many interactions and observations as possible with a cassette recorder and, when appropriate, a video camera. I would also want to conduct a two hour (maximum) focus group session with all participants during the last day of my visit to your firm.

In order to carry out my research successfully, I will need to ensure that you and all of the firm's

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Principals/Partners are willing to allow your interior design employees to participate in the study (please note that I would not be collecting data from or about architects, engineers, planners, etc. who may work in your firm). I have enclosed, for your information, a copy of the consent form that I will ask participants to sign as well as other information such as the proposed itinerary, etc..

Please note that participation in this study must be voluntary, and that employees must not be coerced into participating. Your firm and/or any participant may choose to withdraw from the study at any time, even once data collection has begun. Any information provided by participants or documents collected from your firm will be kept in the strictest confidence. Further information about anonymity and confidentiality are explained in the enclosed consent form.

If you are willing to allow your interior design employees to participate in this study, then **please sign this consent form and return it to me in the envelope provided**. The other copy of the consent form is for your own records. If you agree to participate, then I will also ask you to please provide me with the name of a contact person at your firm (this person must not be a potential participant i.e., interior designer). I will need this person to:

- (a) assist me in arranging the dates for my visit to your firm.
- (b) assemble and return to me prior to the case study visit, various pieces of information about your firm (i.e., floor plans, firm's history, number of employees, etc.).
- (c) introduce me to potential study participants.
- (d) assist me in establishing a time and location for a focus group session.

I am hoping to visit your firm sometime in January or February 2004. Of course, the precise dates of my visit are negotiable since I would want to conduct my research when it is most convenient for you and your employees.

If you wish, you can confirm the authenticity of this study by contacting Dr. Kelvin Seifert in the Department of Educational Administration, Foundations, and Psychology, Faculty of Education, University of Manitoba. Dr. Seifert is my Ph.D. advisor. His telephone number is (204)474-9859, and his email address is [seifert@cc.umanitoba.ca](mailto:seifert@cc.umanitoba.ca). Also, as I mentioned in our telephone conversation, I am an Assistant Professor in the Department of Interior Design, Faculty of Architecture, University of Manitoba. You may visit the Faculty of Architecture web site at <http://www.umanitoba.ca/faculties/architecture/> to confirm my employment.

Sincerely,

**Cynthia M. Karpan**, Assistant Professor (Interior Design) and Ph.D. candidate (Education)  
Room 216 Architecture Two Building  
Home Tel/Fax: (204)775-7453  
Office Tel: (204)474-6075  
Office Fax: (204)474-7533  
Email: [karpanc@cc.umanitoba.ca](mailto:karpanc@cc.umanitoba.ca)  
Web: <http://www.umanitoba.ca/faculties/architecture>

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Firm \_\_\_\_\_

Contact Person \_\_\_\_\_ Phone No. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
Name of Principal/Partner (Please Print)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name of Principal/Partner (Please Print)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name of Principal/Partner (Please Print)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Cynthia M. Karpan, Principal Researcher

\_\_\_\_\_  
Date

\_\_\_\_\_  
Dr. Kelvin Seifert, Ph.D. Advisor

\_\_\_\_\_  
Date



**A Conceptual Framework for Research in Interior Design:  
Implications for Post-secondary Interior Design Education in Canada and the United States**

PRE-VISIT INFORMATION REQUIREMENTS

---

In order to familiarize myself with your firm, I will need you to send me the information listed below prior to my visiting your firm. Please be assured that all of the information provided will be kept in the strictest confidence. The information will be used solely for the purposes of helping me understand your firm's history and context, and creating an accurate profile of your firm.

- Floor plans of your firm's work environment
- Brief history of your firm
- List of major project types (i.e., healthcare, workplace, retail, etc.)
- Breakdown of number of employees in the firm (including interior designers and those in other disciplines)
- List of major awards



**A Conceptual Framework for Research in Interior Design:  
Implications for Post-secondary Interior Design Education in Canada and the United States**

ITINERARY

---

Following is a proposed itinerary for my visit to your firm. On the first day of my visit, I will finalize the itinerary by determining who the study participants might be, and which activities and meetings I may observe.

**Monday**

1. Familiarize myself with the firm.
2. Obtain consent from participants (mandatory) and clients (optional).
3. Establish a time and place for the focus group session.

**Tuesday**

1. Attend meetings, etc..

Location	Time
Location	Time

2. Casual observation, interaction, and conversation with participants about research-related activities.
3. Collect documents.

**Wednesday**

1. Attend meetings, etc..

Location	Time
Location	Time

## Research in Interior Design

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2. Casual observation, interaction, and conversation with participants about research-related activities.
3. Collect documents.

**Thursday**

1. Attend meetings, etc..

Location	Time

Location	Time

2. Casual observation, interaction, and conversation with participants about research-related activities.
3. Collect documents.

**Friday**

1. Attend meetings, etc..

Location	Time

Location	Time

2. Casual observation, interaction, and conversation with participants about research-related activities.
3. Collect documents.

**Saturday, Sunday**

1. Casual observation, interaction, and conversation with participants about research-related activities (if there are any participants working over the weekend).
2. Documentation of the physical environment.

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### Monday

1. Attend meetings, etc..

_____	_____
Location	Time

_____	_____
Location	Time

2. Casual observation, interaction, and conversation with participants about research-related activities.
3. Collect documents.

### Tuesday

1. Attend meetings, etc..

_____	_____
Location	Time

_____	_____
Location	Time

2. Casual observation, interaction, and conversation with participants about research-related activities.
3. Collect documents.

### Wednesday

1. Attend meetings, etc..

_____	_____
Location	Time

_____	_____
Location	Time

2. Casual observation, interaction, and conversation with participants about research-related activities.

Research in Interior Design

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3. Collect documents.

#### Thursday

1. Attend meetings, etc..

_____	_____
Location	Time

_____	_____
Location	Time

2. Casual observation, interaction, and conversation with participants about research-related activities.
3. Collect documents.

#### Friday

1. Conduct focus group session with study participants (no more than two hours).

_____	_____
Location	Time

**A Conceptual Framework for Research in Interior Design:  
Implications for Post-secondary Interior Design Education in Canada and the United States**

FOCUS GROUP GUIDE

---

1. Tell me about how interior designers at your firm would **define or describe research**.
2. **When**, and **for what purpose** do interior designers at your firm **use** research? Please provide an example.
3. What **kinds** of research do interior designers at your firm use, and **how** do they use it? Please provide an example.
4. Who or what company, organization, institution, or publication **produces, conducts, or publishes** the research or knowledge that interior designers at your firm use most frequently?
5. What kinds of research do interior designers at your firm **need**, but currently **do not** have access to?
6. Who or what company, organization, institution, or publication do interior designers at your firm think **should produce, conduct, and/or publish** the research needed?
7. How should research be made **accessible** to interior designers at your firm (i.e., literature, world wide web, product representatives, seminars, conferences, trade shows, continuing education, etc.)?
8. Can you give me an **example of research conducted** by interior designers at your firm?
  - A. Was this research conducted by one or more individuals? If other people were involved, were they interior designers, architects, or experts from other disciplines?
  - B. Was the research conducted a typical or normal part of what goes on in your firm, or was it an unusual situation?
  - C. What did your firm or the interior designer do with the research results?
9. What **facilities and/or resources** does your firm have to support interior designers in conducting their research, and are these facilities and/or resources **adequate**? Explain.
10. Besides the topics that we've discussed already, is there anything else that you think I should know about **research-related activities** at your firm?



UNIVERSITY  
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Faculty of Architecture

Department of Interior Design  
Winnipeg, Manitoba, Canada  
Telephone (204) 474-9386  
Fax (204) 474-7533

<b>Research Project Title</b>	A Conceptual Framework for Research in Interior Design: Implications for Post-secondary Interior Design Education in Canada and the United States
<b>Principal Researcher</b>	Cynthia M. Karpan, Ph.D. candidate Faculties of Graduate Studies and Education, University of Manitoba Tel: (204) 474-6075      Email: karpanc@cc.umanitoba.ca
<b>Ph.D. Advisor</b>	Dr. Kelvin Seifert Department of Educational Administration, Foundations, and Psychology, Faculty of Education, University of Manitoba Tel: (204) 474-9859      Email: seifert@cc.umanitoba.ca

This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

#### Research purpose

To develop a conceptual framework for research in interior design, and to discuss the implications of such a framework for post-secondary interior design education in Canada and the United States. To develop the framework, this research study has been designed to obtain information from numerous participants about research-related activities that occur in interior design educational, practice, and professional organization settings.

#### Procedures

The Principal Researcher will be on site for a period of 10-12 days in total (12 days if there are participants working over the weekend). On the first day, the Principal Researcher will familiarize herself with the interior design department, finalize her itinerary, and establish a time and location for a focus group session. During the next 9-11 days the Principal Researcher will attend meetings and other events where interior design research-related activities may occur, make observations, collect documents for content analysis, and generally interact with and observe study participants. On the last day of the site visit, the Principal Researcher will conduct a focus group session (two hours maximum) with all study participants (or as many as are able to attend). The Interview and Focus Group Guide (enclosed) will be used as a basis for stimulating conversation during the focus

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group session.

Throughout the duration of the case study, the Principal Researcher will use written notes, a microcassette recorder, and a video camera to record information about research-related activities, behaviours, attitudes, and comments. When sensitive material is being discussed or presented, however, or whenever participants feel uncomfortable, they may request that the Principal Researcher turn off the tape recorder and/or video camera.

All participants will partake, voluntarily and without coercion, in the study. Since it may not be possible for the Principal Researcher to remember who has signed consent forms and agreed to participate in the study, all case study participants will wear a lapel pin or similar identification device (provided by the Principal Researcher). The identification device will enable the Principal Researcher to distinguish between study participants and non-participants thereby ensuring that the Principal Researcher collects data from only the individuals who have signed a consent form.

#### **Risk**

Participating in the study presents no risk to participants.

#### **Recording Devices and Original Data**

All written notes and tape recordings will be transcribed verbatim either by the Principal Researcher or by a professional transcriber. The original cassette recordings and transcriptions will be kept by the researcher for a period of 10 years after which time the cassette tapes will be erased as will the discs and/or hard drive/s containing the transcribed interviews. Consent forms, hard copy information about participants, and any documents provided by participants will also be shredded and disposed of after a period of 10 years.

Videotape recordings will not be transcribed. Instead, the videotapes will be used to support and confirm data collected through observation, field notes, and audio recording. Videotapes will be kept by the Principal Researcher for a period of 10 years after which time all tapes will be erased.

#### **Anonymity and Confidentiality**

Two measures will be taken to ensure anonymity. First, pseudonyms will be used throughout the entire dissertation. Pseudonyms will be used for individual participants, educational institutions, practice firms, organizations, and geographic locations. Second, a rigorous member check process will take place in order to ensure that all participants are satisfied with the accuracy of information provided and/or with descriptions rendered of them or their institution, firm, or organization.

Member checks with **all participants** will occur by asking each participant to review all portions of the dissertation pertaining to them. Participants will have one week to review the material to ensure that descriptions of them and their affiliated organizations are disguised to their satisfaction, and that statements made about them are accurate and fair. Participants will forward their feedback to the Principal Researcher who will then make any revisions necessary. Negotiations will continue until all participants and the Principal Researcher are satisfied with the accuracy and fairness of wording and phrases used to describe participants, their activities, and

their affiliated institution, firm, or organization. In the event that participants cannot be satisfied fully, some portions of the dissertation may need to be eliminated (a situation that could result in important descriptions being eliminated from the dissertation, but one in which the Principal Researcher is willing to engage in order to ensure that participants are satisfied with the way they will be represented).

Although every effort will be made to ensure that participants review only the portions of the dissertation pertaining to them directly, there may be some instances where the descriptions being reviewed by participants include descriptions of other participants -- for example, a description of a conversation that took place at a meeting. In this case, even though pseudonyms will be used, participants may recognize the descriptions of others who attended the meeting. However, since the data will have been collected in an "open" environment, it is anticipated that participants will not consider their confidentiality sacrificed when participants from the same group review the same material.

All information provided by study participants will be kept in the strictest confidence. No person other than the Principal Researcher, her advisory committee (Dr. Kelvin Seifert, Dr. Lynn Taylor, Dr. Marcella Eaton, and Professor Nancy Maruca), and a professional transcriber will be allowed access to the original data, transcripts of data, or any material in which participants' identities are revealed. Members of the Principal Researcher's Advisory Committee may view the original data and transcriptions for the sole purpose of ensuring that the Principal Researcher's interpretations of the data are accurate.

#### **Feedback**

All participants will have the opportunity to review the entire dissertation since a bound copy of it will be provided to the contact person at the practice firm. The dissertation will be sent to the contact person once the study has been approved by the Principal Researcher's Advisory Committee, the Faculty of Education, and the Faculty of Graduate Studies at the University of Manitoba (approximately October, 2005).

#### **Dissemination of Results**

Participants are aware that the results of the study will constitute a Ph.D. dissertation in education. As such, the dissertation will be available in the library collection at the University of Manitoba. Additionally, the researcher may publish articles or books, or make presentations about the research findings at conferences, symposia, or other similar events. Participants grant permission to the Principal Researcher to publish, disseminate, discuss, and present the study results for academic and scholarly purposes so long as the guidelines for anonymity and confidentiality (as provided here) are respected.

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Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researchers, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from the study at any time, and/or refrain from answering any questions you prefer to omit, without prejudice or



Research in Interior Design

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consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation. This research has been approved by the University of Manitoba Education/Nursing Research Ethics Board. If you have any concerns or complaints about this project you may contact any of the above-named persons or the Human Ethics Secretariat at (204) 474-7122. A copy of this consent form has been given to you to keep for your records and reference.

---

Name of participant (please print) \_\_\_\_\_

Firm \_\_\_\_\_

\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Cynthia M. Karpan, Principal Researcher

\_\_\_\_\_  
Date

\_\_\_\_\_  
Dr. Kelvin Seifert, Ph.D. Advisor

\_\_\_\_\_  
Date

## Appendix E



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Case Study Sensitizing Framework  
and Observation Guide

Research in Interior Design

**A Conceptual Framework for Research in Interior Design:  
Implications for Post-secondary Interior Design Education in Canada and the United States**

Appendix G: Case Study Sensitizing Framework and Observation Guide

**SENSITIZING FRAMEWORK**

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**The physical setting**

- Site/location, adjacent or nearby amenities
- Floor plan layout – open or closed, circulation patterns, spatial adjacencies, area, volume, light levels, colour, materials, texture, pattern, views and vistas, overall character

**Participants behaviours, activities, interactions, and conversations**

- References to **using** research/knowledge/references (“looking things up”, going to the library, meeting with product representatives, etc.). Types of research or knowledge used, sources of research or knowledge
- References to **conducting** research (collecting data, doing analysis, etc.). Type of research conducted, purpose, methods, results generated
- Meetings, discussions, presentations related to research
- References (verbal, written) to **definition or understanding** of research
- References (verbal, behavioural, written) which suggest **attitudes** towards research (degree to which research is valued)
- References (verbal, written) to **types of research needed**, and **sources** of such research (“I wish we had more information, knowledge, research about . . .”, or “I wish so and so would produce a book/document/summary about . . .”)

**Researcher's behaviour and comments**

- Researcher's response to observed physical setting, behaviours, activities, interactions, and conversations

Research in Interior Design

Date: \_\_\_\_\_  
 Location: \_\_\_\_\_

**A Conceptual Framework for Research in Interior Design: Implications for Post-secondary Interior Design Education in Canada and the United States**  
**Case Study Observation Guide**

Time	Location or Context	Individual/s	Observation PS = Physical setting B = Behaviour A = Activity I = Interactions C = Conversations RB = Researcher Behaviour	Observer Comments RD= Research definition ATR = Attitudes towards research UR = Using research URS = Sources of research used CR = Conducting research RN = Research needed RNS = Sources of research needed



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## Appendix F



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Cover Letter for Study Participants'  
Review of Interpretations



UNIVERSITY  
OF MANITOBA

Faculty of Architecture

August XX, 2004

Department of Interior Design  
Winnipeg, Manitoba, Canada  
Telephone (204) 474-9386  
Fax (204) 474-7533

Mr., Mrs., Ms., Professor, Dr. John Doe  
123 Elm Street  
University  
City, State, Zip code  
Country

**Dear name of participant:**

As discussed when you agreed to participate in my study called "A Conceptual Framework for Research in Interior Design: Implications for Post-secondary Interior Design Education in Canada and the United States", I am writing to you today to ask you to review portions of the dissertation which pertain to you directly.

The purpose of reviewing this material is to ensure that you are satisfied with the degree of anonymity provided, and to ensure that the statements made about you are accurate and fair. As such, I have included only the sections of the dissertation which make reference to the data that I collected from you or your organization. I would ask you to please review the document, make any changes necessary, and return the changes to me within one week. Depending on what works best for you, you may fax me the changes at (204)474-7533, email me the changes, or photocopy the changes and return them by regular mail.

Again, I would like to thank your participation in this study -- without it, I simply would not have been able to complete my study.

Sincerely,

**Cynthia M. Karpan**, Assistant Professor (Interior Design) and Ph.D. candidate (Education)  
Room 216 Architecture Two Building  
Home Tel/Fax: (204)775-7453  
Office Tel: (204)474-6075  
Office Fax: (204)474-7533  
Email: [karpnc@cc.umanitoba.ca](mailto:karpnc@cc.umanitoba.ca)  
Web: <http://www.umanitoba.ca/faculties/architecture>

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## Appendix G



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Thank You Letter for Study Participants





UNIVERSITY  
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Department of Interior Design  
Winnipeg, Manitoba, Canada  
Telephone (204) 474-9386  
Fax (204) 474-7533

October XX, 2005

Mr., Mrs., Ms., Professor, Dr. John Doe  
123 Elm Street  
University  
City, State, Zip code  
Country

**Dear name of participant, contact person, or practice firm Principal/Partner :**

I am writing to inform you that my study called "A Conceptual Framework for Research in Interior Design: Implications for Post-secondary Interior Design Education in Canada and the United States" has been completed.

As promised when I first began the study, I am forwarding to you the enclosed summary or dissertation. I would like to take this opportunity to thank you for participating in the study/for allowing me to conduct a case study of your firm. Quite simply, without your participation/support, I could not have obtained the data I needed. [In addition, your hospitality, generosity, and kindness during my visit to your institution, firm, organizations was appreciated greatly.] Thank you so much for your interest, time, patience, and insight into the topic of research in interior design.

I wish you all the best in your own interior design endeavours.

Sincerely,

**Cynthia M. Karpan**, Assistant Professor (Interior Design) and Ph.D. candidate (Education)  
Room 216 Architecture Two Building  
Home Tel/Fax: (204)775-7453  
Office Tel: (204)474-6075  
Office Fax: (204)474-7533  
Email: [karpanc@cc.umanitoba.ca](mailto:karpanc@cc.umanitoba.ca)  
Web: <http://www.umanitoba.ca/faculties/architecture>

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# Appendix H



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Copyright Consent Forms

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FACULTY OF GRADUATE STUDIES  
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I, Cynthia Karpan, a graduate student at the University of Manitoba, request permission to quote/reproduce the following material listed below in preparation of my thesis/practicum for the degree of Ph.D.. My thesis/practicum will be microfilmed by Library and Archives Canada and copies of the film will be reproduced, lent or sold through University Microfilms International (UMI). I would be very grateful for your favorable consideration of this request. Thank you for your assistance.

Authorization is granted to the above named graduate student, the University of Manitoba and Library and Archives Canada to reproduce:

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Image, pg. number:	1. Table V Employment Situation, p. 11 2. Table VII Number of Interior Designers on Staff at Primary Employment, p. 12
Publisher, year:	National Council for Interior Design Qualification (NCIDQ), 2003
Journal name, issue number, year:	N/A

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Education in Canada and the United States"

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I, Cynthia Karpan, a graduate student at the University of Manitoba, request permission to quote/reproduce the following material listed below in preparation of my thesis/practicum for the degree of Ph.D.. My thesis/practicum will be microfilmed by Library and Archives Canada and copies of the film will be reproduced, lent or sold through University Microfilms International (UMI). I would be very grateful for your favorable consideration of this request. Thank you for your assistance.

Authorization is granted to the above named graduate student, the University of Manitoba and Library and Archives Canada to reproduce:

Title of article/book:	IIDA Industry Advisory Council 6: Executive Summary (Pushing the Edge of the Playground: Using Research to Elevate the Playing Field)
Image, pg. number:	Ultimate Goal, p. 1 (see attached image)
Publisher, year:	International Interior Design Association (IIDA), n.d. (Does IIDA have the exact date of this publication?)
Journal name, issue number, year:	N/A — September, 2003

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\_\_\_\_\_

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