
A Survey on Practitioner Attitudes Toward Research in Interior Design Education

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ABSTRACT

The purpose of this study was to investigate interior design practitioners' perceived attitudes toward the inclusion of research at the undergraduate and graduate levels, minimum degree requirements for practice and teaching, and the value of the graduate degree in the field of interior design. Interior design practitioners who are members of the American Society of Interior Designers (ASID) were surveyed ($n = 250$) using an online questionnaire based on several existing scales. The questionnaire was distributed through a primary contact with ASID as an e-mail blast to all members within the organization. As a whole, the participants in this investigation believed that undergraduate and graduate students should have an understanding of research and be able to apply findings to design projects. However, practitioners did not respond positively to positioning the Master of Interior Design (MID) as the first professional degree or to a graduate degree in general as a minimum credential to practice. Some practitioners valued the graduate degree to increase marketability, enhance the prestige of the profession, and provide specialization. Others placed more emphasis on practical experience, continuing education, and innate talent rather than a graduate degree. More educated individuals with advanced degrees who were younger than 40 and were practicing commercial design were significantly more likely to value research. The fact that some educators have been advocating for the MID as the first professional degree for the discipline shows a disconnect between practice and academia.

Introduction

According to Piotrowski (2008), a profession has a number of common elements, including the use of skills based on theoretical knowledge, education and training of skills, the competence of professionals ensured by examinations, a code of conduct to ensure professional integrity, performance of a service that is for the public good, and a professional association that organizes members (p. 6). Many scholars agree that a profession defines its own specialized knowledgebase and that one contributing factor to this knowledgebase is research (Anderson, Honey, & Dudek, 2007; Birdsong & Lawlor, 2001; Blackmer, 2005; Marshall-Baker, 2005; Thompson & Guerin, n.d.).

The purpose of a first professional degree (the bachelor's in most cases) is to provide a broad understanding and knowledgebase of a profession. First professional degrees do not lead to specialization or knowledge that advances a profession (White &

Dickson, 1994). The master's degree, on the other hand, implies that the individual who obtains this degree has mastery over the subject matter and has acquired specialized knowledge. The postprofessional master's degree allows the individual to build upon an existing foundation in the field and emphasizes critical thinking (White & Dickson, 1994). The end product of the master's degree is typically a research investigation/project meant to advance the body of knowledge for a profession (White & Dickson, 1994). As a result, some interior design educators have argued for a 5-year first professional Master's of Interior Design (MID) degree that incorporates both design practice and research (Dohr, 2007; Guerin, 2007; Thompson & Guerin, n.d.; Weigand & Harwood, 2007).

While these arguments are important to the profession and critical for the advancement of graduate education, past investigations suggest that most interior design practitioners do not value

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advanced degrees in the discipline (Birdsong & Lawlor, 2001; Dickson & White, 1993; White & Dickson, 1994). At a time of increasing complexity and specialization within the field of interior design along with the advent of evidence-based design, does this attitude still prevail? Before interior design programs implement and finance new graduate degrees such as the MID, it would be useful to reexamine practitioner perceptions of research in education since these attitudes were last investigated nearly two decades ago (Dickson & White, 1993). The purpose of this investigation was to survey practicing professionals to determine their attitudes toward the inclusion of research at the undergraduate and graduate levels, minimum degree requirements for practice and teaching, and the value of the graduate degree in the field of interior design.

Literature Review

Research in Interior Design Education and Practice

Most scholars have defined research as the discovery of new information that expands the knowledgebase of the profession (Groat & Wang, 2002; Guerin & Dohr, 2007; Sommer & Sommer, 2002; Wang, 2007). In examining definitions of research that range from 1964 to 2007 from a variety of fields of study, including architecture, education, home economics, interior design, and psychology, terms such as “systematic,” “patient study,” and “discovery” are repeated throughout (Dickinson & Marsden, 2009). The goal of research is to discover new information or expand knowledge in a field, even if this creation of knowledge occurs in small increments (Dickinson, Anthony, & Marsden, 2009; Dickinson & Marsden, 2009; Fraenkel & Wallen, 2006; Groat & Wang, 2002; Guerin & Thompson, 2004; Sommer & Sommer, 2002; Touliatos & Compton, 1988).

While the definitions of research have not changed in over 40 years, an understanding of research in interior design education and practice often seems to be lacking among students, educators, and practitioners.

Dickinson, Marsden, and Read (2007) found that while undergraduate interior design students from three research universities valued research, they could not accurately define the term research and relied quite heavily on soft sources of information such as the Internet, text books, and magazines for the “research” phases of their projects. In a follow-up study, Dickinson et al. (2009) surveyed interior design faculty and discovered that educators who responded to the questionnaire do not have a working definition of research. Both these studies begin to suggest that faculty and students liken research to information gathering and do not understand that research, which is a hallmark of a profession, is meant to advance the field of interior design (Thompson & Guerin, n.d.). Best noted that the simple gathering of information does not constitute research (cited in Dickson & White, 1993). These studies also suggest the practicing professional may complete an undergraduate degree without acquiring an understanding of research or a foundation in research skills.

Birdsong and Lawlor (2001) surveyed design practitioners who were employed by some of the top 100 firms as identified by *Interior Design* magazine to determine their perceptions toward the most important components of professionalism. As stated in the paper, professionalism included education, examination, ethics, licensing, and professional association. When rating the most important components of a profession, the accreditation of interior design programs ranked first, followed by state licensing, research, examination, and graduate education. In fact, 64.9% of the sample felt that research was an important part of a profession, and none of the participants stated that research in interior design was not important. The results from this study suggest a profession that values research.

Dickson and White (1993) surveyed interior design practitioners who were leaders or emerging leaders at the executive level to determine the role of research for the profession and the types and sources of research used in practice. Practitioners were asked to choose between two definitions of research, and

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the majority ($n = 76$) chose: “A process used in design problem solving that uses data collection, analysis, and synthesis” over “A process that uses accepted methods and procedures to establish findings that increase the body of knowledge for the design profession” (p. 6). To further understand practitioner definitions of research, the sample was asked to provide a level of agreement or disagreement on four additional definitions. “Gathering factual data that pertains to design problems and human factors for the purpose of solving a specific interior problem” received the highest level of agreement (p. 6). Yet, many of the sample members also agreed that research is “advancing or creating knowledge,” suggesting that practitioner definitions are multifaceted. The majority of practitioners saw the role of research as facilitating problem solving, which supported “their belief in the importance of research to the profession” (p. 7).

Dickson and White (1993) also examined how frequently interior design practitioners researched a design problem and what kinds of sources were used. The results indicated that 34% of interior design practitioners researched a design problem 100% of the time, but 27% indicated they only researched a design problem 25% of the time. In terms of the sources used, 82% used product catalogs, 71% used trade magazines, and 57% used books in the firm’s individual library (i.e., soft sources). However, 47% indicated they never consulted scholarly journals (i.e., hard sources) in their research process. While design practitioners may have varied definitions of research, these findings suggest that a reliance on soft sources instead of hard sources of information during the design process seems to take precedence.

The Role of Graduate Education

“...America’s leadership in research and innovations forthcoming from research have driven our nation’s national pre-eminence and economic competitiveness. . . . Graduate education is the essential element in producing research and innovation going forward” (Tate, 2005, p. 1). As noted above, research plays a predominant role in graduate education. The

goal of the postprofessional degree is to build upon an existing foundation, while providing specialized knowledge that often leads to research (White & Dickson, 1994). As stated by Thompson and Guerin (n.d.), “To solidify Interior Design’s position as a legitimate academic discipline based on a well-defined body of knowledge, research is essential” (p. 1). This research is often generated when completing the master’s and Ph.D. degrees.

More recently, design educators show a renewed focus on the graduate degree (Guerin & Thompson, 2004; Thompson, 2007) due to the emergence of evidence-based design, a lack of qualified interior design faculty, and the increased complexity of the profession (Dohr, 2007). In 2006, the committee of members from the Interior Design Educators Council (IDEC) convened to address “the value of the master’s degree in the context of interior design education” (IDEC Position Paper, 2006, p. 1). When comparing postprofessional and first professional master’s programs, the committee noted that some first professional programs only provide professional training and do not include a research component. The committee proposed a first professional, terminal degree (MID) that incorporates both design practice and research (IDEC Position Paper, 2006; Weigand & Harwood, 2007). Additionally, the committee noted the grave shortage of interior design educators and discussed the lack of clarity on what constitutes the terminal degree in interior design as one factor that has led to the shortage (Thompson, 2007).

In many institutions of higher education, the Master of Art (MA) and/or the Master of Science (MS) are not viewed as terminal degrees and are thought of as prerequisites for the Ph.D. In contrast, the Master of Fine Arts (MFA) and Master of Architecture (MArch) are understood to be terminal degrees. Furthermore, a variety of degree types and academic locations (e.g., home economics, art, or architecture) have exacerbated confusion (IDEC Position Paper, 2006; Weigand & Harwood, 2007). In examining Interior Design and Related Graduate Programs in the United States and Canada, 10 different graduate degrees were listed (Interior Design and Related

Previous research showed that practitioners recognized that a graduate degree provided specialization in design areas and the necessary qualifications needed to teach but many respondents believed that specialization could be obtained through continuing education.

Graduate Programs, 2010). These degrees included the traditional MFA, MS, and MA, as well as the MID, Master of Design, Master of Professional Studies in Sustainable Interior Environments, Master of Environmental Design, MA in Interior Design, MS in Interior Architecture, and Master of Interior Architecture. These degrees vary in duration and content (e.g., studio vs. research; IDEC Position Paper, 2006; Interior Design and Related Graduate Programs, 2010).

In response to the IDEC Position Paper (2006), the Editor-in-Chief of the *Journal of Interior Design* (2007) invited reaction from design educators on the MID issue. Both Guerin and Kroelinger encouraged exploration of the MID as the first professional degree. Guerin noted that this first professional degree must not only include all the necessary standards seen in first professional degree outcomes but must have a research component (p. 11). Kroelinger, however, expressed concern about one degree path supporting professional practice, scholarship and research, and teaching. Specifically, Kroelinger questioned the resources needed for a 5-year first professional degree. As stated by Kroelinger, "I encourage exploration of the MID as the first-professional degree but urge caution in the process" (p. 16). Rabun, on the other hand, expressed less support for the MID proposal and stated, "...I do not believe that a first professional accredited master's degree (MID) can replace the combined accredited bachelor's degree and post professional master's degree" (p. 20).

Following the publication of the IDEC Position Paper, the Kimball Office Work Group published *Sustaining Interior Design Education* and noted reasons for the shortage of qualified interior design educators (Dohr et al., 2008). The group pointed out that many graduating students and practicing designers have not been given adequate knowledge regarding teaching as a profession choice. Many educators will retire in record numbers, and recent interior design students who could replace retiring educators are drawn to the profession as a result of Home and Garden Television (HGTV) rather than a desire to advance the knowledgebase. More importantly, Dohr et al.

(2008) stated that "A graduate degree is not valued by design firms, i.e., little or no increased pay for those who earn an advanced degree, no knowledge of what an advanced degree can bring to the firm, etc." (p. 3). This last statement is of concern to the profession particularly during a time when some design educators are exploring the MID as the first professional degree (Guerin, 2007; Guerin & Thompson, 2004; Weigand & Harwood, 2007). As noted by Kroelinger (2007), "Will employers hire program graduates at appropriate salaries that justify the additional costs of obtaining the [MID] degree" (p. 16)?

Perceived Value of Graduate Education

In 1992, the Foundation for Interior Design Education and Research (FIDER now the Council for Interior Design Accreditation) suggested that a graduate degree is needed primarily for persons wishing to teach (White & Dickson, 1994). This statement supported a long-held tradition in which liberal arts master's degrees are presented to individuals who plan to teach in public schools. Despite the statement by FIDER and the undergraduate focus, a few scholars examined the need for graduate education in interior design. White and Dickson (1994) surveyed leaders of interior design organizations to determine their attitudes toward graduate education. While many of the practitioners in their sample concluded that the purpose of a graduate degree was to provide specialization in design areas (33%) and the necessary qualifications needed to teach (26%), many respondents believed that specialization could be obtained through continuing education (38%). Some of the participants surveyed (25%) were not convinced that graduate education was important to the field of interior design, given compensation and advancement realities. To the practitioner, professional experience, not a graduate degree, produces the most qualified interior designers.

Birdsong and Lawlor (2001) surveyed design practitioners to determine their attitudes toward professionalism. In this study, graduate education

was listed last of importance out of the five components of a profession (i.e., accreditation of undergraduate programs, state licensing, NCIDQ exam, research, and graduate education). Asked to evaluate its importance to the profession, 34.1% of the respondents rated it 5 (*very important*) or 4, and 27.6% rated it 1 (*not important*) or 2, with a mean score of 3.13. When asked to evaluate its advantages to the respondent, 30.8% rated it 5 or 4 and 32.9% rated it 1 or 2, with a mean score of 2.98. Most subjects were in the middle when it came to graduate education as an important component of professionalism. Birdsong and Lawlor also examined perceived support for graduate education among practitioners. The results indicated that 50% of the respondents thought their firms do not encourage graduate education and do not pay for advanced degrees; however, 26.6% reported their firms encouraged graduate education and 39.4% reported their firms paid for higher education credits.

Summary

While a few studies have been completed that have investigated practitioner attitudes toward research and graduate education, the last time attitudes about research were studied among interior design practitioners was almost 20 years ago. It is critically important for interior design educators to understand whether these attitudes have changed, particularly since the introduction of evidence-based design. Results from practitioners could lead to curriculum changes at both the undergraduate and graduate level to provide more meaningful research experiences. But before implementation takes place, updated information on practitioner attitudes is needed.

Research on the value of graduate education as perceived by interior design practitioners also has been limited and has not been revisited in 10 years. Since then, the MID has been proposed as the terminal, first professional degree for interior design. Before interior design programs consider extending first professional degree requirements, current information on whether the master's degree

is valued by practitioners is needed. Traditionally, the bachelor's degree was understood to be the requirement for practice, while the master's degree was only needed for teaching. Does this same attitude still prevail in professional practice?

In the Dickson and White (1993) and White and Dickson (1994) studies, 96 interior designers who were considered leaders in the field were surveyed. Birdsong and Lawlor (2001) had 94 useable questionnaires in their study that tapped into 43 of the top 100 firms. Increasing the number of surveyed practitioners would be advantageous.

This study investigates whether practitioners' attitudes toward research and graduate study have changed in the past decade and increases the sample size. It examines their attitudes about research at the undergraduate and graduate levels, minimum degree requirements for practice and teaching, and the perceived value of the graduate degree. Information about whether these attitudes have changed since previous studies were completed can provide a helpful context for the current discussions about graduate education. The results from this investigation are part of a larger study that examines practitioner attitudes toward research and included questions on the definitions of research, evidence-based design, and programming and the attitudes toward research in interior design practice, undergraduate and graduate education, and research and programming practices. The larger study also builds upon two earlier studies that examined student and educator attitudes toward research in interior design (Dickinson et al., 2007, 2009).

Methods

Sample

Targeted respondents were the approximately 13,000 members of the American Society of Interior Designers (ASID). ASID was chosen because it is the oldest, largest, leading professional organization for interior designers in the United States and

traditionally has members who practice in the areas of both commercial and residential design (ASID, 2010). ASID distributed an e-mail blast encouraging all members to participate in an online questionnaire, which yielded 310 participants (response rate of 2.4%). Of the 310 responses, we received 250 useable questionnaires.

Instrument

The questionnaire, developed by the principal investigators, was based on several existing scales (e.g., Chenoweth & Chidister, 1983; Dickinson et al., 2007, 2009; Dickson & White, 1993) and consisted of four sections. The first two sections, which were used for another part of the larger study, asked respondents to define research, programming, the differences between programming and research, and evidence-based design and examined attitudes toward research in design practice. This paper focuses on the results from the latter two sections of the questionnaire. In section 3, respondents were asked six close-ended questions regarding their attitudes toward research in interior design undergraduate education. In section 4, three open-ended questions and 10 close-ended questions were used to determine subject's attitudes toward graduate education. In developing the instrument, the principal investigators used the wording on some of the questions from the Dickinson et al. studies to facilitate comparison of practitioner, student, and faculty attitudes toward research in practice and education. A Likert scale, where 1 equaled *strongly agree* and 5 equaled *strongly disagree*, was used for the close-ended questions. For sections 3 and 4, the following instructions were given along with a definition of research:

Section 3: *“For the questions below, we are asking for your attitudes toward research as they relate to interior design education.”*

Section 4: *“For the questions below, we are asking for your attitudes toward graduate education. The beginning questions are open-ended in nature, while the remaining*

questions require that you circle your answer below.”

Sections 3 and 4: *“When answering the questions, please use the following definition for research:*

Research is a systematic process of collecting, analyzing, and interpreting information (data) in order to ... communicate what we discover to the larger community” (Groat & Wang, 2002; Leedy & Ormrod, 2005, p. 2).

“Please circle your answer below. Note the following: 1 = Strongly Agree; 2 = Agree; 3 = Unsure; 4 = Disagree; and 5 = Strongly Disagree”

In the last part of the questionnaire, subjects were asked demographic questions related to programming and research practices along with their practice and education experience.

The questionnaire was pilot tested on three practicing professionals to ensure that the online format was correct and to measure the content validity of the survey instrument. One of the principal investigators contacted the three practicing professionals (two who worked in large commercial firms; one who was a sole proprietor) via e-mail with access to the questionnaire link. No changes to the online format or content of the questionnaire were needed based on their comments.

Analysis

The questionnaire was uploaded to Qualtrics, an online survey software program. The only identifier to each completed questionnaire was an IP address that was not traceable to the respondent. On receipt, the survey software numbered completed questionnaires sequentially. These assigned numbers served to identify the completed questionnaires.

Responses to close-ended questions were analyzed using descriptive statistics in the form of frequencies

and percentages. Differences between groups were analyzed using independent *t*-tests and analysis of variance tests. Significant *f*-values were analyzed using Tukey's post hoc analysis for multiple comparisons. A significance level of .05 was established. Responses to each demographic question were listed and grouped into similar categories. Responses for the open-ended questions were coded by underlining similar phrases or keywords and analyzed for themes.

Results

Sample

The majority of the sample was female (86%) and nearly one-third was between the ages of 50 and 59 years (31%). Many of the individuals who responded to the survey had over 20 years of professional practice experience (44%). A number of participants in this highly experienced cohort were either principals in firms (29%) or sole proprietors (29%). The majority worked in smaller firms with 1–10 employees (69%) to provide residential (60%), kitchen and bath (35%), and/or office (46%) design. The education level of the sample varied with seven individuals practicing without any degree. Forty individuals had an associate's degree in interior design, 135 had a bachelor's degree in interior design, 20 had a master's degree in interior design, and 1 was pursuing a Ph.D. in interior design (Table 1). As shown in Table 1, the degree types varied among the individuals in this sample.

As a whole, the participants in this investigation believed that undergraduate students should have an understanding of research. When asked, "I think a course should be taught to undergraduate interior design students on how to evaluate the research findings of others," 80% of the sample agreed ($n = 119$) or strongly agreed ($n = 79$) with this statement. When subjects were asked if undergraduate interior design students should know how to conduct research about an interior design issue, again the results were positive with 75% of the subjects agreeing ($n = 109$) or strongly agreeing ($n = 76$). Individuals who were

under the age of 40 were significantly more likely to agree with this statement ($t = -2.01, p = .046$) than their older counterparts. Ninety-four percent of the sample agreed ($n = 125$) or strongly agreed ($n = 107$) with the statement that undergraduate interior design students should know how to use research results in design studio projects. Individuals who were under the age of 40 ($t = -2.26, p = .025$) and who practiced commercial design versus residential design were significantly more likely to agree ($t = 2.63, p = .010$; Tables 2 and 3). Education level also made a difference as those who had a master's degree were significantly more likely to agree with this statement versus those who had an associate's degree, $F(4, 212) = 3.09, p = .017$ (Tables 4 and 5).

In examining graduate education, practitioners again thought that graduate interior design students should be able to evaluate the research findings of others (82% agreed, $n = 102$, or strongly agreed, $n = 93$) and should be taught how to conduct research (89% strongly agreed, $n = 107$, or agreed, $n = 104$). Those who practiced commercial design were significantly more likely to think that graduate students should be able to evaluate research findings versus those who practiced residential design ($t = 2.10, p = .037$). Individuals who had practiced for <20 years were significantly more likely to think that graduate students should be taught how to conduct research ($t = -2.20, p = .029$). When asked, "I think graduate interior design students should know how to use research results in design studio projects," 95% of the sample strongly agreed ($n = 115$) or agreed ($n = 108$) with this statement, and individuals who practiced commercial design ($t = 2.34, p = .021$) and those who had a master's degree versus an associate's degree were significantly more likely to agree, $F(4, 206) = 3.17, p = .015$.

Minimum Degree Requirements

A number of questions related to degree type and readiness for professional practice or university teaching were asked. "Interior designers should have a minimum of a bachelor's degree to practice"

Table 1. Sample characteristics

	<i>Frequency</i>	<i>Percentage</i>
Gender (<i>n</i> = 231)		
Male	33 individuals	14
Female	198 individuals	86
Age (<i>n</i> = 234)		
20–29 years	30 individuals	13
30–39 years	29 individuals	12
40–49 years	53 individuals	23
50–59 years	73 individuals	31
60–69 years	42 individuals	18
70–79 years	7 individuals	3
Years of practice in interior design (<i>n</i> = 234)		
0–5 years	48 individuals	21
6–10 years	35 individuals	15
11–15 years	21 individuals	9
16–20 years	27 individuals	12
Over 20 years	103 individuals	44
Current position in firm (<i>n</i> = 233)		
Principal	68 individuals	29
Sole proprietor	67 individuals	29
Senior interior designer	23 individuals	10
Interior designer	32 individuals	14
Junior interior designer	4 individuals	2
Project manager	6 individuals	3
Other	33 individuals	14
Number of employees in your firm (<i>n</i> = 232)		
0–10 employees	161 individuals	69
11–50 employees	36 individuals	16
51–100 employees	9 individuals	4
101–150 employees	6 individuals	3
151–200 employees	1 individual	0
201–251 employees	2 individuals	1
Over 250 employees	17 individuals	7
Degree type		
No degree	7 individuals	
Interior design certificate or diploma	9 individuals	
Other certificates	5 individuals: 1 advertising art; 1 health care design; 1 marketing management; 1 occupational therapy; 1 drafting	
ID associate's degree	40 individuals	
Other associate's degrees	19 individuals: 1 architectural drafting; 1 architectural engineering; 4 art; 1 biology; 1 chemistry; 1 CAD; 1 English literature; 1 fabric design; 4 liberal arts; 1 marketing; 1 Spanish; 1 theater; 1 visual communication	
ID bachelor's degree	135 individuals	
Other bachelor's degrees	74 individuals: 1 accounting; 5 architecture; 9 art; 1 art history; 3 business; 1 British civilization; 1 chemistry; 1 commerce; 1 communications; 1 decorative art; 3 design; 1 design, housing, and merchandising; 2 elementary education; 2 education; 2 English; 1 foreign affairs; 5 home economics; 1 hospitality; 1 humanities; 1 international trade; 1 journalism; 2 liberal arts; 1 management; 4 marketing; 5 nursing; 1 performing art; 1 planning; 1 political science; 7 psychology; 4 social welfare; 4 textiles/apparel	
ID master's degree	20 individuals	

Table 1. *Continued*

	Frequency
Other master's degrees	32 individuals: 2 art; 1 art history; 1 communications; 2 education; 1 educational psychology; 1 environmental design; 1 design; 1 fashion; 1 furniture design; 1 interdisciplinary; 1 IT; 6 MArch; 6 master's of business administration (MBA); 1 nursing; 3 urban planning; 2 social science; 1 theater
ID Ph.D. degree	1 (ABD) individual
Other Ph.D. degrees	4 individuals: 1 anthropology; 1 design construction; 1 education; 1 environmental planning

Note: Some subjects may be included more than once. For example, an individual could have a bachelor's, master's, and Ph.D. in Interior Design. This is why no "n" or percentage is given for degree type.

received strong agreement (71% of the sample strongly agreed, $n = 117$, or agreed, $n = 60$). Individuals who were under the age of 40 ($t = -3.06$, $p = .002$) and who practiced commercial design were significantly more likely to agree with this statement ($t = 4.25$, $p = .000$). Education level also made a difference as those who had a bachelor's and/or a master's degree were significantly more likely to agree with this statement versus those who had an associate's degree, $F(4, 212) = 10.86$, $p = .000$. When this same question was worded differently, "A bachelor's degree should be the first professional degree in order to practice as an interior designer," the agreement was similar (71% of the sample strongly agreed, $n = 98$, or agreed, $n = 71$). Individuals who practiced commercial design ($t = 4.73$, $p = .000$) and who had a bachelor's degree and/or master's degree versus an associate's degree were significantly more likely to agree, $F(4, 209) = 9.97$, $p = .000$. "A minimum of a bachelor's degree in interior design is necessary for university teaching" also received strong agreement (71% of the sample strongly agreed, $n = 112$, or agreed, $n = 63$ (Tables 2, 3, 4, and 5).

The findings on the master's degree and readiness for professional practice were not as positive. "The Master's of Interior Design should be the first professional degree in order to practice as an interior designer" received strong disagreement (87% of the sample strongly disagreed, $n = 109$, or disagreed, $n = 102$), and education level made a difference. Individuals who had the Ph.D. were significantly more likely to agree with this statement versus

those who had no degree or an associate's degree. Individuals who had a master's degree and/or a Ph.D. were significantly more likely to agree versus those who had a bachelor's degree, $F(4, 212) = 5.27$, $p = .000$. Additionally, interior designers should have a minimum of a master's degree to practice was not well received (95% of the sample strongly disagreed, $n = 138$, or disagreed, $n = 87$). Individuals who had the Ph.D. were significantly more likely to agree with this statement than the rest of the sample, and those who had a master's degree were more likely to agree than those who had a bachelor's degree, $F(4, 209) = 7.65$, $p = .000$. While "A minimum of a master's degree in interior design is necessary for university teaching" received mixed responses, 20% strongly agreed ($n = 48$); 25% agreed ($n = 59$); 17% were unsure ($n = 40$); 29% disagreed ($n = 69$); and 9% strongly disagreed ($n = 22$), those who practiced commercial design were significantly more likely to agree with this statement ($t = 2.34$, $p = .021$). Individuals holding the master's degree were significantly more likely to agree with this statement versus those who had no degree combined with those having a bachelor's degree, $F(4, 209) = 4.32$, $p = .002$ (Tables 2, 3, 4, and 5).

Value of the Graduate Degree

The study also posed questions relating to the graduate degree and marketability. While "A graduate degree in interior design increases the designer's marketability" yielded mixed responses, 13% strongly agreed ($n = 30$); 31% agreed ($n = 75$); 26% were unsure ($n = 61$); 22% disagreed ($n = 52$); and

Table 2. Survey instrument with frequencies for each response category for the close-ended questions related to undergraduate and graduate education

Question	SA	A	U	D	SD	n
Undergraduate education						
1 I think a course should be taught to <i>undergraduate</i> interior design students on how to evaluate the research findings of others	79	119	23	23	4	248
2 I think a course should be taught to <i>undergraduate</i> interior design students on how to conduct research about an interior design issue	76	109	29	28	4	246
3 I think <i>undergraduate</i> interior design students should know how to use research results in design studio projects	107	125	9	5	1	247
4 Interior designers should have a minimum of a <i>bachelor's degree</i> to practice	117	60	23	21	26	247
5 An <i>undergraduate degree</i> in interior design provides opportunities for specialization	44	91	45	53	12	245
6 A minimum of a <i>bachelor's degree</i> in interior design is necessary for university teaching	112	63	20	34	18	247
Graduate education						
1 I think a course should be taught to <i>graduate</i> interior design students on how to evaluate the research findings of others	93	102	27	12	5	239
2 I think a course should be taught to <i>graduate</i> interior design students on how to conduct research about an interior design issue	107	104	18	5	3	237
3 I think <i>graduate</i> interior design students should know how to use research results in design studio projects	115	108	8	3	1	235
4 A <i>bachelor's degree</i> should be the first professional degree to practice as an interior designer	98	71	21	23	25	238
5 The <i>Master's of Interior Design</i> should be the first professional degree to practice as an interior designer	2	5	23	102	109	241
6 Interior designers should have a minimum of a <i>master's degree</i> to practice	2	1	10	87	138	238
7 A <i>graduate degree</i> in interior design provides opportunities for specialization	70	105	28	21	14	238
8 A minimum of a <i>master's degree</i> in interior design is necessary for university teaching	48	59	40	69	22	238
9 A <i>graduate degree</i> in interior design increases the designer's marketability	30	75	61	52	21	239
10 A <i>graduate degree</i> in interior design enhances the prestige of the profession in the eyes of other professionals and the public	59	81	60	21	19	240

Note: SA, strongly agree; A, agree; U, unsure; D, disagree; SD, strongly disagree. n varies on each question depending on the response rate.

9% strongly disagreed ($n = 21$), nearly half or more practitioners surveyed agreed with this statement. When asked, “A graduate degree in interior design enhances the prestige of the profession in the eyes

of other professionals and the public,” 59% of the sample agreed ($n = 81$) or strongly agreed ($n = 59$), and individuals who practiced commercial design were significantly more likely to agree ($t = 2.54$,

Table 3. Means and standard deviations for age, firm type, and number of years practiced

Question	Age	N	M	SD	t	df	p
I think a course should be taught to undergraduate interior design students on how to conduct research about an interior design issue	20–39 years	59	1.86	0.90	-2.01	230	.05*
	40–79 years	173	2.17	1.04			
I think undergraduate interior design students should know how to use research results in design studio projects	20–39 years	59	1.49	0.63	-2.26	231	.03*
	40–79 years	174	1.72	0.70			
Interior designers should have a minimum of a bachelor’s degree to practice	20–39 years	59	1.64	1.13	-3.06	231	.00**
	40–79 years	174	2.26	1.40			
Question	Firm type	N	M	SD	t	df	p
I think undergraduate interior design students should know how to use research results in design studio projects	Residential	53	1.87	0.94	2.63	138	.01**
	Commercial	87	1.53	0.59			
I think a course should be taught to graduate interior design students on how to evaluate the research findings of others	Residential	52	2.06	1.09	2.10	138	.04*
	Commercial	88	1.69	0.93			
I think graduate interior design students should know how to use research results in design studio projects	Residential	51	1.67	0.82	2.34	135	.02*
	Commercial	86	1.40	0.54			
A graduate degree in interior design provides opportunities for specialization	Residential	52	2.50	1.37	2.74	135	.01**
	Commercial	85	1.94	1.04			
Interior designers should have a minimum of a bachelor’s degree to practice	Residential	52	2.58	1.47	4.25	138	.00**
	Commercial	88	1.66	1.07			
A bachelor’s degree should be the first professional degree to practice as an interior designer	Residential	52	2.73	1.51	4.73	135	.00**
	Commercial	85	1.72	0.99			
A minimum of a master’s degree in interior design is necessary for university teaching	Residential	51	3.04	1.31	2.34	136	.02*
	Commercial	87	2.49	1.33			
A graduate degree in interior design enhances the prestige of the profession in the eyes of other professionals and the public	Residential	51	2.71	1.27	2.54	137	.01*
	Commercial	88	2.17	1.16			
Question	Years practiced	N	M	SD	t	df	p
I think a course should be taught to graduate interior design students on how to conduct research about an interior design issue	0–20 years	129	1.59	0.81	-2.20	228	.03*
	Over 20 years	101	1.82	0.78			

Note: 1, strongly agree; 2, agree; 3, unsure; 4, disagree; 5, strongly disagree.
* $p < .05$. ** $p < .01$.

$p = .012$) than those focused in other market sectors (Tables 2 and 3).

Questions were also asked relating to specialization within the profession. For example, “An undergraduate degree in interior design provides opportunities for specialization” received fairly strong agreement (55% of the sample either agreed, $n = 91$, or strongly agreed, $n = 44$). When undergraduate was replaced with graduate, 73% of the sample agreed ($n = 105$) or strongly agreed ($n = 70$) with this statement. Individuals who practiced commercial design ($t = 2.74$,

$p = .007$) and those who had a bachelor’s and/or master’s degree versus no degree were significantly more likely to agree that a graduate degree provides opportunities for specialization, $F(4, 209) = 5.65$, $p = .000$ (Tables 2, 3, 4, and 5).

In addition to the close-ended questions, participants responded to three open-ended questions probing the value of the graduate degree. For example, participants were asked whether their firm valued a graduate degree in interior design, and 129 responded no, 62 responded yes, 5 did not know, 15 replied with somewhat, 13 responded with N/A, and the rest did

Table 4. Means and standard deviations for highest education level

Question	Education level	N	M	SD	f (df)	p
I think undergraduate interior design students should know how to use research results in design studio projects	No degree	6	2.00	0.63	3.09 (4,212)	.02*
	Associate's degree	22	2.00	0.69		
	Bachelor's degree	141	1.67	0.70		
	Master's degree	44	1.45	0.63		
	Ph.D.	4	1.25	0.50		
I think graduate interior design students should know how to use research results in design studio projects	No degree	6	1.83	0.41	3.17 (4,206)	.01*
	Associate's degree	20	1.80	0.89		
	Bachelor's degree	139	1.58	0.63		
	Master's degree	42	1.33	0.53		
	Ph.D.	4	1.00	0.00		
A graduate degree in interior design provides opportunities for specialization	No degree	6	3.50	1.64	5.65 (4,209)	.00**
	Associate's degree	21	2.48	1.37		
	Bachelor's degree	139	2.22	1.09		
	Master's degree	44	1.64	0.78		
	Ph.D.	4	1.75	0.50		
Interior designers should have a minimum of a bachelor's degree to practice	No degree	6	3.17	1.72	10.86 (4,212)	.00**
	Associate's degree	21	3.52	1.33		
	Bachelor's degree	142	1.84	1.22		
	Master's degree	44	1.75	1.06		
	Ph.D.	4	1.75	0.96		
A bachelor's degree should be the professional degree to practice interior design	No degree	6	3.33	1.86	9.97 (4,209)	.00**
	Associate's degree	21	3.57	1.33		
	Bachelor's degree	141	1.95	1.24		
	Master's degree	42	1.86	1.05		
	Ph.D.	4	2.50	1.29		
The Master's of Interior Design should be the first professional degree to practice as an interior designer	No degree	6	4.17	0.75	5.27 (4,212)	.00**
	Associate's degree	21	4.38	0.86		
	Bachelor's degree	142	4.41	0.70		
	Master's degree	44	4.05	0.71		
	Ph.D.	4	3.00	1.63		
Interior designers should have a minimum of a master's degree to practice	No degree	6	4.33	0.52	7.65 (4,209)	.00**
	Associate's degree	21	4.57	0.75		
	Bachelor's degree	139	4.64	0.55		
	Master's degree	44	4.27	0.58		
	Ph.D.	4	3.25	1.71		
A minimum of a master's degree in interior design is necessary for university teaching	No degree	6	3.67	1.37	4.32 (4,209)	.00**
	Associate's degree	20	3.00	1.38		
	Bachelor's degree	140	2.92	1.26		
	Master's degree	44	2.16	1.24		
	Ph.D.	4	2.00	1.41		

Note: 1, strongly agree; 2, agree; 3, unsure; 4, disagree; 5, strongly disagree.
* $p < .05$. ** $p < .01$.

not reply. A number of themes emerged from this open-ended question, including professional practice experience is more important than the graduate

degree ($n = 47$ for phrases such as professional practice experience, prior work experience, real-world experience, hands-on experience, practical

Table 5. Tukey's post hoc analysis for multiple comparisons

<i>Question</i>			<i>p</i>
I think undergraduate interior design students should know how to use research results in design studio projects	Associate's degree	No degree	1.00
		Bachelor's degree	.21
		Master's degree	.02**
		Ph.D.	.26
I think graduate interior design students should know how to use research results in design studio projects	Associate's degree	No degree	1.00
		Bachelor's degree	.57
		Master's degree	.52*
		Ph.D.	.14
A graduate degree in interior design provides opportunities for specialization	No degree	Associate's degree	.24
		Bachelor's degree	.04**
		Master's degree	.00***
		Ph.D.	.09
	Bachelor's degree	Associate's degree	.85
		Master's degree	.02**
		Ph.D.	.90
		No degree	.07
Interior designers should have a minimum of a bachelor's degree to practice	Bachelor's degree	Associate's degree	.00***
		Master's degree	.99
		Ph.D.	1.00
		No degree	.06
	Master's degree	Associate's degree	.00***
		Ph.D.	1.00
		No degree	.99
		Bachelor's degree	.00***
A bachelor's degree should be the first professional degree to practice interior design	Associate's degree	No degree	.99
		Bachelor's degree	.00***
		Master's degree	.00***
		Ph.D.	.50
	No degree	Associate's degree	.97
		Bachelor's degree	.93
		Master's degree	.99
		Ph.D.	.02**
The Master's of Interior Design should be the first professional degree to practice as an interior designer	Associate's degree	Bachelor's degree	1.00
		Master's degree	.43
		Ph.D.	.01***
		Master's degree	.04**
	Bachelor's degree	Ph.D.	.00***
		Associate's degree	.92
		Bachelor's degree	.75
		Master's degree	.99
Interior designers should have a minimum of a master's degree to practice	No degree	Ph.D.	.05*
		Associate's degree	.99
		Bachelor's degree	.35
		Ph.D.	.00***
	Associate's degree	Master's degree	.01***
		Ph.D.	.00***
		Master's degree	.01**
		Ph.D.	.01**

Table 5. *Continued*

Question	p		
A minimum of a master's degree in interior design is necessary for university teaching	No degree	Associate's degree	.79
		Bachelor's degree	.62
		Master's degree	.05*
		Ph.D.	.25
	Bachelor's degree	Associate's degree	.99
		Master's degree	.01***
		Ph.D.	.61

*p < .055. **p < .05. ***p < .01.

experience, and experience), the graduate degree is only needed for teaching ($n = 11$ for the words teaching, educator, education, and teach), certification is more important ($n = 8$ for words such as NCIDQ, LEED AP, CID, and state registration), innate talent is more valued ($n = 14$ for words such as talent, artistic talent, innate ability, and talent-based), and the size or type of firm affects the amount of education needed ($n = 16$ for words such as residential, small, and sole proprietor). Below, select comments for each theme define distinct practitioner perceptions of graduate education and research:

Professional Practice Experience

If a person already has an undergraduate degree in design, I think that professional experience is more valuable than a masters. A graduate degree would only be beneficial in developing an interior design undergrad into a specialty area such as healthcare. (Commercial Designer, under the age of 40, no advanced degree)

From what I know of graduate programs, I would have to say a graduate degree is not as valuable as practical work-based experience. I would rather hire a 25-year old designer with three years of experience and a bachelor's from a reputable program than a designer with a bachelor's and master's and no practice experience. I highly value graduate programs, but they cannot

replace the experience of working in a firm as part of a team, understanding office politics, observing and participating in client meetings. . . (Commercial Designer, over the age of 40, master's degree)

No. The problem with graduate degrees is that the professors and instructors frequently have little or irrelevant experience on the job themselves. They say they have experience but that too often means they do work on the side or have worked with a small firm. Unless they have a minimum of five years with a large firm, they really cannot guide students as needed. All teachers should have passed the NCIDQ exam themselves. This should be a requirement for hiring teachers and those who have not passed the exam at this point should be asked to take it now. We would all have more respect for the university staff if this was implemented. . . then maybe we could talk about graduate programs. I would more likely hire someone who had worked at a respected design firm for two years than one who had a graduate degree. (Commercial Designer, over the age of 40, no advanced degree)

Teaching

As an educator, a graduate degree in interior design is essential. However, having previously worked for an expert commercial

design firm and acting as senior management there, the company did not feel higher education beyond the bachelor's degree had any value. This may have stemmed from the fact that the company felt on-the-job training more practical and efficient when hiring someone with an advanced degree. . . . (Commercial Designer, under the age of 40, master's degree)

. . . I think a graduate degree in interior design is considered useless by the field except as a requirement for teaching. (Commercial Designer, over the age of 40, master's degree)

Certification

In interior design, I don't see the point to getting a master's degree when so much focus is placed on the National Council for Interior Design Qualification (NCIDQ) and being Certified Interior Designer (CID), especially from ASID. (Commercial Designer, under the age of 40, master's degree)

I value the 4-year accredited Interior Design undergraduate degree, several years of experience/apprenticeship, the passing of the NCIDQ exam, state registration and Leadership in Energy and Environmental Design (LEED) Accredited Professional (AP) as important qualifications to practice in my firm. (Commercial Designer, over the age of 40, no advanced degree)

Innate Talent

Not valuable. In my experience, hiring and managing interior designers at all levels (degreed, not degreed, experienced, not experienced), I have learned that a degree does not begin to provide the minimum standards of performance I would expect of an employee. I would rather hire an inexperienced high school graduate with talent for interior design than a graduate of a design program who cannot think in three dimensions or

rotate an object in space (in their head). (Commercial and Residential Designer, over the age of 40, no advanced degree)

Firm Type and Size

This would not be necessary at my firm. While I have a bachelor's degree in Interior Design, our firm is rather small. A graduate degree would be more than needed for the projects we do. (Commercial Designer, under the age of 40, no advanced degree)

While the majority of the sample did not think their particular firm would value the graduate degree, there were positive responses that suggested some individuals understood the benefit of advanced education. To illustrate, we had a few individuals mention that a graduate degree provided more research experiences ($n = 9$ for the terms research or theory), while several stated that a graduate degree provided increased specialization, differentiation, or benefit ($n = 20$). Sample comments are listed in the following sections.

Research and Theory

Somewhat. It gives the student more time to develop design and research skills to apply during practice. Although hands-on experience is very beneficial, not all designers have a well-rounded situation in which to practice and not all designers are working under a well-educated, experienced, or talented senior designer. Graduate programs provide a more controlled environment and provide opportunities about research possibilities. (Commercial Designer, over the age of 40, master's degree)

I have an M.A. degree and find it extremely valuable. The research experience and knowledge I gained from that degree give me more confidence and stature with my clients. I evaluate information better. (Commercial and Residential Designer, over the age of 40, master's degree)

As a whole, most firms do not compensate employees to pursue graduate degrees.

Yes. I am a principal and I hold a master of architecture degree. The design theory gleaned from this education informs and enriches the design produced by my firm. (Commercial and Residential Designer, over the age of 40, master's degree)

Value, Specialization, Benefit, and Differentiation

Most graduate degrees include experiences that develop higher level cognitive strategies of designers. Designers with graduate degrees are better able to synthesize the varied parameters of a design problem and assimilate the varied results of programming to create a more thoughtful solution. (Residential Designer, over the age of 40, Ph.D.)

It represents a higher level of commitment and learning that can benefit clients and the business overall. (Residential Designer, over the age of 40, no advanced degree)

Yes it is valuable. I so value the opportunity to update and enhance my professional knowledge that I have gone back to get my master's degree in Healthcare Design, after many decades in the design business. This degree will allow me to differentiate myself from many other senior designers, as well as permitting me to teach at the college level. . . . (Commercial Designer, over the age of 40, no advanced degree)

Next, we examined this open-ended question to determine whether education level, age, or firm type made a difference and found the responses to be mixed. When analyzing the open-ended responses for those individuals who had a master's degree, many still stated that professional practice experience was more valued by their particular firm ($n = 8$) as evidenced by the following comment: "I believe a designer should practice as an interior designer first, gaining 'real world' experience in the design world in some capacity before going on to graduate levels in

design. Too much time in education without the real world to balance the experience does not present a realistic view of the design profession. I see a graduate degree in design most helpful to an individual if, after a period of years with practical experience working in a structured design firm, the designer then wishes to specialize in an area of the field or go on to teach." Another individual responded with, "Probably not as much as it should be. Graduates of master's programs and their colleges need to inform the firms hiring graduates of how evidence based design makes them a better designer." Age and firm type did not make a difference on this open-ended question.

As a whole, most firms do not compensate employees to pursue graduate degrees. When asked, "Does your firm compensate employees who pursue a graduate degree," 119 replied no, 28 responded yes, 13 were unsure, 4 stated that the firm use to, 42 replied with N/A, and others did not reply. While many of the same themes discussed above emerged, additional reasons such as the poor economy affecting reimbursement for graduate studies ($n = 9$ for words such as economy and recession), the value of continuing education (CEUs) over the graduate degree ($n = 6$ for the word continuing education), and the benefit of advanced study for the individual rather than the firm ($n = 5$ for phrases such as personal accomplishment and personal endeavor) surfaced as other topics of concern (see comments in the following section).

Poor Economy

Most firms do not (compensate employees to pursue graduate degrees), given the very bad economy we are dealing with. Very few firms will reimburse the graduate student for courses, unfortunately. (Commercial Designer, over the age of 40, no advanced degree)

Importance of CEUs

No—being small we hire a designer and then put them to work—we support continuing education—but not going back to school. (Commercial Designer, over the age of 40, no advanced degree)

There were some respondents who believed that a graduate degree would be beneficial and a worthy expenditure for the firm.

No. It is not necessary to (the) profession in practice. If done correctly it would be to prepare for teaching. Many aspects of the profession are learned on the job after basic education. The profession is also constantly evolving but that is addressed through CEU classes. (Residential Designer, over the age of 40, no advanced degree)

Personal Achievement

No. Advancing education is considered a personal endeavor. (Commercial Designer, under the age of 40, no advanced degree)

...As a designer's graduate education degree was seen as a personal accomplishment rather than one that would promote the efforts of the firm, pursuit was in no way compensated or encouraged. (Commercial Designer, under the age of 40, no advanced degree)

There were, however, some individuals who believed that a graduate degree would be beneficial and a worthy expenditure for the firm as evidenced by comments such as:

Yes. My firm wants the best and the brightest to present it. A higher education equals a higher profile. (Residential and Commercial Designer, under the age of 40, no advanced degree)

My firm would compensate employees who pursue a graduate degree, as any formalized body of knowledge can only add to their development, innovation, and skill sets that in turn would contribute back to my company. (Commercial Designer, over the age of 40, no advanced degree)

In the last open-ended question, we asked participants whether employees with a graduate degree in interior design received an increase in their salary, and 37 responded yes, 79 said no, 17 indicated sometimes, 52 did not know, and 29 responded with N/A.

Of those who did not know, 28 believed that an individual with a graduate degree in interior design should receive higher compensation. The predominant theme to emerge with this question was that work experience and on-the-job performance or abilities were more important indicators for a pay raise ($n = 47$). Comments included the following:

No. I would pay someone with a graduate or undergraduate only degree the same unless they had a number of years of experience. (Residential and Commercial Designer, over the age of 40, no advanced degree)

I don't think so. If there was an employee that had a 2-year degree and 2 to 4 years of field experience, I would pay them more than somebody with just 4 to 6 years of schooling and no field experience. (Residential and Commercial Designer, over the age of 40, no advanced degree)

Yes, the graduate may have a higher salary, but it is proven over the years that the most talented person, in whatever field they are proficient in, will excel because they are driven and love what they do. A degree does not make a person smarter in what they do; it just proves they can pass a test. (Residential and Commercial Designer, over the age of 40, no advanced degree)

A couple of interesting responses made us question whether some of the participants understood the goal of graduate education and whether the graduate degree was first or postprofessional. To illustrate,

No. I have talked to several people about getting a master's degree vs. NCIDQ/CID and there really isn't anything extra to learn in a master's interior design program that would increase a raise in salary. Most master design programs are very broad with just doing an independent study. If there is any opportunity to specialize in

Overall the practitioners believed that both undergraduate and graduate interior design students should be educated to evaluate the research findings of others and conduct research about an interior design issue.

depth much more than what a bachelor's degree could provide, there is an opportunity.
(Commercial Designer, under the age of 40, master's degree)

In some cases the graduate degree is a repeat of an undergraduate degree. . .the curriculum is almost identical. I think if the degree allowed for specialization and honing of targeted skills and an area of focus, it would be more valuable to all involved. . .
(Residential and Commercial Designer, over the age of 40, no advanced degree)

We also looked at the responses for those individuals who had a master's degree and found the responses to be similar as evidenced by the following comment: "Graduate degrees do not increase salary for new hires. I'm living proof!" Age and firm type did not make a difference.

Discussion

As a whole, the practitioners in the sample believed that both undergraduate and graduate interior design students should be educated to evaluate the research findings of others and conduct research about an interior design issue. There was even greater support for both undergraduate and graduate students to know how to apply research results to their design projects. This is consistent with the Dickinson et al. (2007, 2009) studies; both interior design undergraduate students and faculty also believed it was more important to apply research results to design studio projects versus taking a course on how to evaluate or conduct research. All these investigations begin to suggest that evidence-based design is of mounting importance to practitioners. On the basis of this finding, educators may want to examine their curriculum to ensure that students are able to use research results in their studio courses. This result also begins to suggest that a separate course on design research may not be needed as much at the undergraduate level since practitioners seem

to be advocating more application approaches that could occur in the studio.

Although practitioners agreed that both undergraduate and graduate students should be educated to conduct research about an interior design issue, there was more support for this at the graduate level. Again, this is consistent with the Dickinson et al. (2009) study. Considering that the goal of the graduate degree is to build upon an existing foundation, obtain mastery over a particular subject matter, and conduct research meant to advance the body of knowledge, this finding is not surprising and begins to suggest that some practitioners in this study appreciate the role of graduate education (White & Dickson, 1994).

When asked about minimum degree requirements, almost three-fourths of the participants agreed that a bachelor's degree was needed to practice and teach interior design, but a large percentage did not believe that the MID should be the first professional degree to practice. When asked whether a minimum of a master's degree was needed to practice, there was even stronger disagreement. In contrast, individuals who had earned the master's degree and/or Ph.D. were significantly more likely to agree with the need for advanced education, showing that individuals who have the master's degree themselves understand its value. While some educators have been advocating for the MID as the first professional degree (Dohr, 2007; Guerin, 2007; Guerin & Thompson, 2004; Thompson & Guerin, n.d.; Weigand & Harwood, 2007), the results from this study suggest that this degree may not be valued and shows a disconnect between the academy and practice. As stated by Poldma (2008), "In interior design, unfortunately, part of the problem is that quite often the realms of education, academic research, and practice are worlds apart" (p. vii).

When practitioners were asked whether the graduate degree was valued by their firm, over half said no. Most practitioners felt that professional practice was more important than graduate education as summed up by the comment, "No, I prefer on the job experience. I think graduate study is inferior." This

finding supports the research conducted by White and Dickson (1994), who also found that professional practice experience over graduate education was seen as producing the most qualified interior designers and the findings of Birdsong and Lawlor (2001) that firms did not support or encourage graduate education. “Does your firm compensate employees who pursue a graduate degree,” 119 replied no. Some practitioners believed that a graduate degree was only needed for university teaching and would not bring value to their firm. Another theme to emerge involved the value of innate talent over graduate education in practice. One participant stated, “I strongly feel that in interior design its talent first, project management second, and accounting and marketing acumen third...interior design has little to do with design education. Very little. You can’t teach it. You either got it or you don’t.” Participants also placed emphasis on NCIDQ certification over graduate education.

In the White and Dickson (1994) study, practitioners stated that graduate education was not essential because practicing designers could obtain knowledge through CEUs. This same theme emerged in this study when some of the participants suggested that CEUs were more important than graduate education. While continuing education is certainly important to the profession, and many states require a certain number of CEU credits to maintain licensing, CEUs often deliver a specific content area in a short amount of time and do not allow the practitioner to obtain a specialization (White & Dickson, 1994). For example, ASID requires professional members to complete six contact hours of continuing education coursework (0.6 CEUs) every 2 years to retain their ASID membership (ASID, 2010), which is hardly comparable to the amount of time and other requirements for original research needed to complete the graduate degree. Graduate education provides the individual with the knowledgebase to conduct research that expands the body of knowledge in the area of expertise and contributes to design theory, which is one characteristic of a profession (Anderson et al., 2007; Marshall-Baker, 2005). A master’s degree often takes a minimum of 1–2 years

to complete versus the 1–8 credit hours offered through CEUs (ASID, 2010).

Other findings suggest the graduate degree is seen as having positive values. Almost half of the respondents agreed that a graduate degree increases the designer’s marketability and enhances the prestige of the profession, and almost three-quarters agreed that it provides opportunities for specialization. Dickson and White (1993) also found that the practitioners in their sample concluded that the purpose of a graduate degree was to provide specialization.

There were several limitations in this study. First, while the sample provided a fairly even distribution between residential and commercial designers, the sample contained 67 individuals (29%) who were sole proprietors and 161 individuals (69%) who worked in smaller firms of 0–10 people. The results may have been different if a greater number of individuals from larger firms had been surveyed. In the future, it would be useful to target practitioners who are involved in health care design, which is now relying on evidence-based design.

Second, some of the survey questions may have caused confusion. On the basis of several responses, some individuals may not have understood the term “graduate degree.” There were a few comments in which the individual considered graduate degree to mean bachelor’s degree. For future research, the term “graduate degree” should be changed on all the open-ended questions to “master’s degree.” Moreover, clarity is needed with respect to the differences between a first and postprofessional master’s degree. For example, we had some subjects who stated that a graduate degree is a repeat of the undergraduate degree. Another individual stated, “The employees I have worked with received a higher initial salary because of the graduate degree. In all cases, they did not last with the company due to lack of basic knowledge and skills.” These comments suggest that a graduate first professional degree may be causing some confusion on the value of the traditional postprofessional degree. A number of subjects indicated that if the degree provided

The practitioner respondents strongly supported having both undergraduate and graduate students apply research results to their design projects.

additional specialization, it would be useful. This finding is important, and we have to wonder if Weigand and Harwood's (2007) proposal of the MID as the first professional degree would allow for enough specialization to occur? Rabun (2007) also questioned whether an additional year of schooling could really provide an understanding of research methods that leads to a specialized research base that occurs through the traditional bachelor's, postprofessional masters, and doctorate degree path. Future research should distinguish between the first and postprofessional master's degrees.

Third, the term "specialization" was not defined in the survey, and this term may have different meanings in practice and academia. For practice, specialization could imply specializing in an area of design such as health care or corporate or on a particular topic such as lighting. To the academic, specialization implies a profession's specialized knowledgebase and understanding that this knowledgebase emerges from critical inquiry, which is a hallmark of research (Friedman, 2001). In other words, academics understand that the postprofessional master's degree often requires students to complete a research study/project that leads to specialized knowledge that expands the profession. While most practicing professionals in the sample thought that graduate education provided opportunities for specialization, it is difficult to determine how the individuals in the sample defined specialization.

What is so disappointing is that the results of this study largely validate the findings in the White and Dickson (1994) study. The themes that emerged from the study place emphasis on the practical side of the profession and suggest that interior design is a trade rather than a profession. The comments made by some individuals in our sample emphasize the examination and skill side of design, but do not consider that a profession must also have a knowledgebase that is contributed to by its members (Piotrowski, 2008). As noted by Moore cited in Birdsong and Lawlor (2001), "the college baccalaureate degree should be the minimum for the professional, and the quality of education must

provide a clear distinction between the person with formal training and the person who is merely experienced" (p. 21). Yet, some of the open-ended responses in our study indicate that interior design is a talent that cannot be taught, which seems to minimize the importance of education. On the basis of the responses from the sample, interior design educators have not communicated the value of the graduate degree.

There are positive findings from this research study. Individuals who were under the age of 40, who worked in the area of commercial design, and who had advanced degrees seemed to be more supportive of having undergraduate students use research results in design studio projects. While age and firm type did not influence attitudes toward graduate education, degree type did. As expected, those who had an advanced degree were more receptive to having the master's as the first professional degree for teaching and practice. These findings suggest that perhaps the tide is changing in terms of graduate education and research for the profession. As noted by one individual, "Graduates of master's programs and their colleges need to inform firms hiring of how evidence based design makes them a better designer." This same individual noted that although firms are not currently providing employees with more pay for the graduate degree, this may change in the future.

Despite some of the positive findings, this study suggests that interior design still has progress to make in educating practitioners on the value of research and the graduate degree. How can this happen? Here are several ideas:

1. *Infuse research at the undergraduate level* (Dickinson et al., 2007; Kroelinger, 2007). As stated by Kroelinger, "Advocating a sound research basis for design is essential. Our students need it and their future clients expect it" (p. 16). On the basis of the findings from this investigation, provide undergraduates with applicable research experiences so they understand what constitutes research and the

The findings of this study suggests that interior design still has progress to make in educating practitioners on the value of research and graduate education.

role that research plays during the design process to gain knowledge on evidence-based decision making. Make sure undergraduates understand the creative versus the applied science of design. Give students the opportunity to experience the research process, which may spark their interest in more in-depth advanced study obtained through a master's degree. Most importantly, make sure students can apply research findings to their studio projects.

2. *Educate the undergraduate on the significance of the graduate degree.* Make sure that students understand the role of the bachelor's versus the master's so they are aware of the differences between the two degrees. Students should be informed that a bachelor's provides broad-based knowledge, while a master's not only allows for specialization in an area of interest but also provides more research experiences that helps expand the body of knowledge for the profession. Make sure that undergraduates understand that a profession defines its own specialized knowledgebase and that one contributing factor to this knowledgebase is research (Anderson et al., 2007; Birdsong & Lawlor, 2001; Blackmer, 2005; Marshall-Baker, 2005; Thompson & Guerin, n.d.). Educate undergraduates on the differences between a first professional versus a postprofessional master's degree.
3. *Market graduate education to undergraduate interior design students* (Dohr et al., 2008). Many undergraduates do not see advanced study as a career option upon graduation. Before graduation, make sure undergraduates understand the benefits of the master's and how to access graduate programs (Dohr et al., 2008). Use practitioners who have the master's degree themselves as proponents of graduate education. As noted by one practicing professional, make the graduate degree a career choice, and better educate firms on the value of the degree.

“The difficulty of fitting research into the field of design is not rooted in the nature of design. Neither is it rooted in the nature of design knowledge. The great difficulty arises from a field of practice with a

huge population of practitioners who were trained in the old vocational and trade traditions of design” (Friedman, 2001, p. 45). Change must occur at the undergraduate level so that graduate education will be more valued by the interior design field in the future. If not, interior design may as well settle on becoming a trade rather than a profession. Interior design educators must take a more proactive stance on marketing the graduate degree so that more firms will better understand what an advanced education can offer and provide compensation that is commensurate with the expertise gained through graduate studies.

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