



# Designed to mislead

How Industry Insiders Mislead the Public  
About the Need for Interior Design Regulation



By Dick M. Carpenter II, Ph.D.  
Institute for Justice  
September 2008

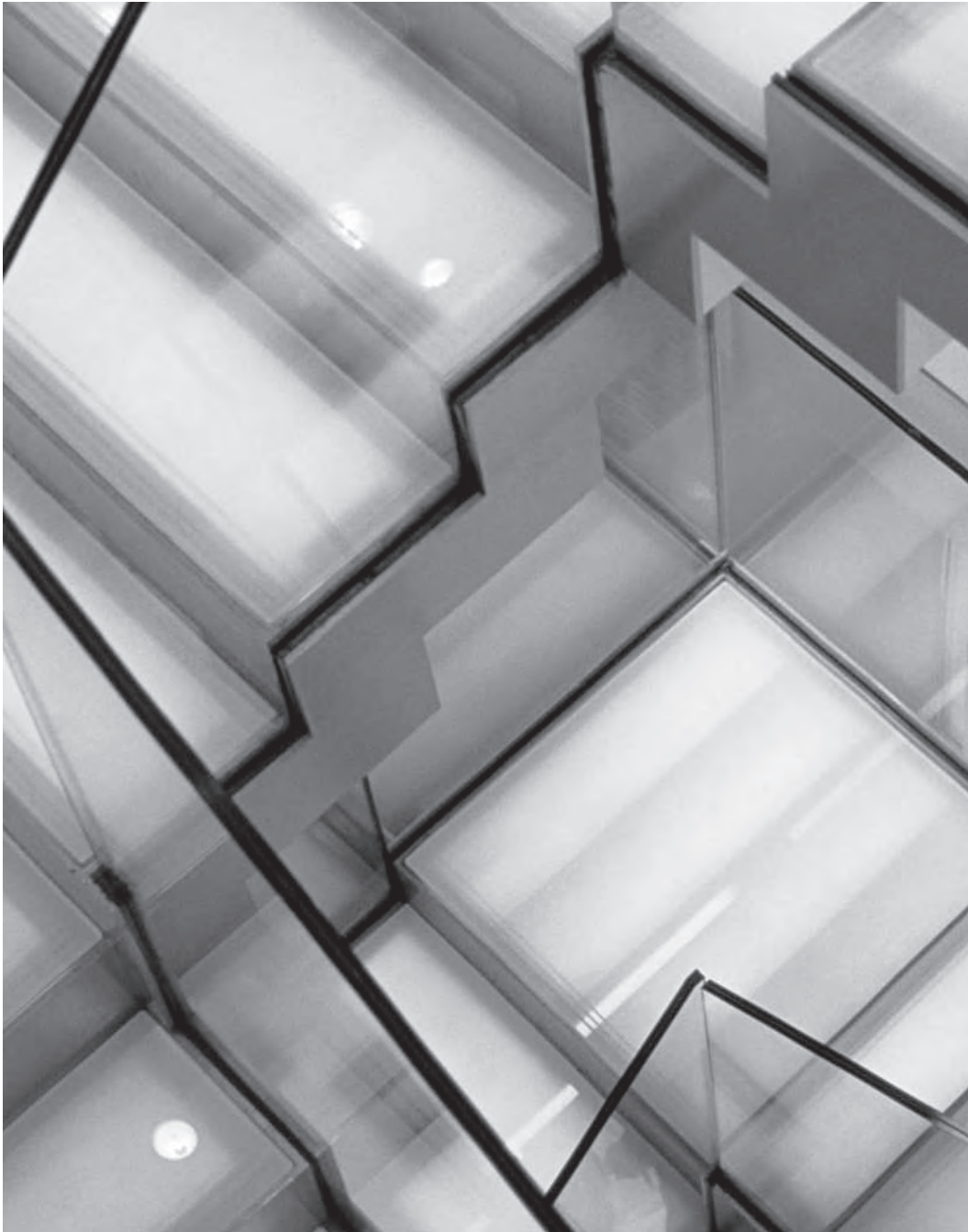
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## Executive Summary

Do people who design interiors “mislead” the public when they call themselves “interior designers” without government permission? Industry insiders advocating greater regulation say yes, but practicing interior designers who simply want to accurately describe what they do say no. This report tests each side’s claims.

For the past 30 years, insiders in the interior design industry—led by the American Society of Interior Designers and its state affiliates—have waged a campaign in state legislatures nationwide to secure ever-greater regulation of their occupation. They aim to limit competition in the field by simply regulating it away—establishing legal barriers that make it difficult if not impossible for even experienced designers to pursue their trade, let alone newcomers who show a passion and talent for design and an ability to please clients.

So-called “titling” laws are often the opening legislative salvo for regulation. These laws reserve the use of the title “interior designer” to those who have met education and apprenticeship requirements and passed a national exam. Under these laws, people may perform design work without jumping through legal hoops, but they may not call themselves “interior designers” without a government license.

ASID and its allies say such laws are necessary to keep the public from being misled. They assert that having the “Three Es” of education, experience and examination is the very definition of “interior designer.” By contrast, entrepreneurs who simply want to accurately describe what they do argue that interior designers are defined by their work, not the qualifications they hold.

Using an opinion poll and a survey of leading industry magazines, we sought to find out what the public and industry writers really think when they hear the title “interior designer.” Results indicate:

- The public thinks “interior designers,” first and foremost, design interiors.
- The public does not associate “interior designers” with the qualifications of a specialized education, apprenticeship and passing an exam.
- Likewise, the leading interior design publications pay no attention to state-mandated qualifications when they call people “interior designers.”

These results demonstrate that, in fact, no one is misled by people who perform interior design work calling themselves “interior designers,” regardless of their educational background or other credentials. This squares with the experience of actual design entrepreneurs who report that their customers care about their style and their work, not the degree they hold or whether they passed any test.

Indeed, imposing qualifications by law that lack any basis in evidence is what misleads the public—not designers who honestly describe what they do.

The public sees no difference between interior designers and unregulated occupations when it comes to whether practitioners have certain qualifications. So why have the regulations?



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## Introduction

There is something the state of Connecticut does not want anyone to know about Jane Speroff and Cindy Hernandez. Likewise for Maria Gore and Amy Williamson in Oklahoma. All four of them are interior designers. But state law forbids them from telling anyone that. That is because even though it is perfectly legal for them to work as interior designers, Connecticut and Oklahoma are among a handful of states that license the use of the title “interior designer” without licensing the work itself.

Under little-known provisions called “titling” laws, five states, including Connecticut and Oklahoma, prohibit people who lawfully perform interior designer work from calling themselves “interior designers” in advertising, on business cards or in casual conversation unless they have what amounts to a free-speech license permitting them to use that term. And obtaining the license is not easy. It generally requires a two- or four-year college degree in interior design from an accredited school, completion of a two-year or longer apprenticeship under a state-certified interior designer, and passing a national interior design exam that has little to do with the day-to-day work of most interior designers.

Contrary to the rhetoric of those who push for such titling laws, interior design work presents no genuine threat to public health or welfare, nor does the use of the term “interior designer” by people with different educational backgrounds, levels of experience and expertise threaten to “mislead” the public. Jane, Cindy, Maria and Amy are cases in point. All hold college degrees and two hold graduate degrees. Jane, Maria and Cindy entered the interior design industry after successful business careers, and Amy began design work after completing an interior design degree. All of them are passionate about interior design and good at their work. Jane even boasts award-winning designs. All four completed interior design training of various kinds. In hundreds of occupations across the United States, this would be more than enough to hang out a shingle, and in most states it is. But in Connecticut, Oklahoma and other states, their shingles cannot read “interior designer.”

We first examined titling laws in a report entitled *Designing Cartels: How Industry Insiders Cut Out Competition*,<sup>1</sup> in which we showed how a faction of interior design leaders, led by the American Society of Interior Designers (ASID), seeks to use titling laws as a first step toward full occupational licensure. This would not only prohibit the use of the title “interior designer” but also limit the practice of interior design to people who meet ASID’s one-size-fits-all, government-mandated education, experience and examination requirements—known in the interior design industry as the “Three Es.” These practice acts erect a significant barrier to entry into the occupation, thereby limiting competition and creating economic benefits for those already practicing.

Industry “cartelizers” like ASID justify practice acts as a way to protect the public health, safety and welfare from allegedly unqualified design practitioners. Yet, as we showed in *Designing Cartels*, data from states with interior design regulation indicate no empirical public benefit from such laws, and there is no evidence of a threat to public health, safety or welfare from unlicensed designers—points regulation advocates have yet to refute.<sup>2</sup>

## What it Takes to Work As or Call Oneself an Interior Designer

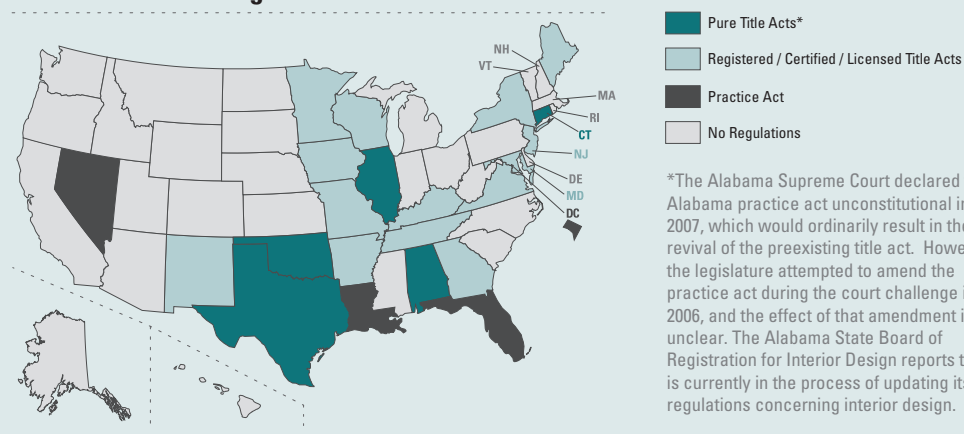
Twenty-two states and the District of Columbia regulate interior design in some fashion. As the map below shows, three states and the District of Columbia require state permission to perform certain types of interior design work. Five states allow anyone to practice interior design, but require a license to call oneself an “interior designer” or to describe one’s work—accurately—as “interior design.” Another 14 states require a license for people wishing to use titles like “licensed” or “certified” or “registered” interior designer. The latter group has the least restrictive laws, but as we found in *Designing Cartels*, industry organizations view all title acts of this kind as stepping-stones to full-blown occupational licensing laws. Twenty-eight states do not regulate interior design at all.

All interior design laws establish specific requirements either to perform certain types of interior design work or to use the title of “interior designer” or related titles. These requirements are typically:

- **Education:** Designers must have a four-year degree or a two-year degree combined with a certain number of years of experience in the field.
- **Experience:** After graduation, designers must apprentice with a licensed or state-approved designer for at least two years, more if the would-be designer lacks a four-year degree from an accredited institution.
- **Examination:** Designers must pass a 13.5-hour national interior design exam created by the National Council for Interior Design Qualification, a group created by the American Society of Interior Designers.

### INTERIOR DESIGN

#### Current Status of Regulations



Unable to support claims of harm from unregulated designers, regulation advocates began asserting that titling and licensure laws are necessary to keep consumers from being “misled.” However, it turns out that in the minds of consumers and leading industry reporters and editors, interior designers are defined by what they do—design interiors—and not by arbitrary state-mandated qualifications.



## What is an “Interior Designer”?

According to ASID, people who call themselves “interior designers” without meeting state-mandated criteria “mislead” the public into believing they possess qualifications or credentials that they do not. Regulation advocates claim that the term “interior designer” has an inherent and widely shared meaning: a person who has attained a specific education, completed a supervised apprenticeship and successfully passed a national examination—the same Three Es required under state titling and licensure regulations.

In short, ASID and its allies assert that a person meeting an interior designer or seeing an ad for an interior design services thinks, “Here is a person who has the Three Es,” because that is the very definition of “interior designer.” By contrast, entrepreneurs like Jane, Cindy, Maria and Amy believe that interior designers are defined by what they do—plan, furnish and decorate interior spaces.

This difference is further illustrated in Table 1, which contrasts ASID’s definition of interior designer with the U.S. Department of Commerce’s definition. ASID clearly emphasizes the Three E qualifications, while the Department of Commerce defines interior design based on the nature of the work. In fact, although Table 1 includes only the first sentence of the Department of Commerce’s definition, nowhere in the remaining definition do the Three Es appear.

**Table 1: Competing Definitions of “Interior Designer”**

Definition Based on Qualifications—ASID	Definition Based on Nature of Work—Department of Commerce
“The professional interior designer is qualified by education, experience and examination to enhance the function, safety and quality of interior spaces.” <sup>3</sup>	“Plans, designs, and furnishes interior environments of residential, commercial, and industrial buildings.” <sup>4</sup>

The “misleading” argument, premised on the claim that interior designers are defined by their qualifications instead of the work they perform, has real consequences. The state of Texas has offered this argument in defense of its titling law in federal court,<sup>5</sup> even though it has no real empirical footing.<sup>6</sup> Until now, the closest any research has come to testing the “misleading” proposition was a survey completed by ASID measuring public perception of interior designers.<sup>7</sup> The ASID study found, “Respondents offered many different definitions of an interior designer, ranging from consultant or artistic visionary to shopper or hired hand. No one clear definition surfaced, although a number of similar themes frequently occurred.”<sup>8</sup>

Of the top six responses to the question “What is your definition of an interior designer?”, only one referred to professional training or experience, and only 19 percent of respondents gave that answer. Other responses included:

- Someone who consults, makes suggestions, helps, gives ideas about design or

décor: 22 percent

- Someone whose ideas unify/coordinate an entire room/rooms using furniture, fixtures, etc: 18 percent
- Someone who alters the appearance of a house/rooms according to the wishes/tastes of the client: 16 percent
- Someone who decorates or designs the interior of a house/rooms: 14 percent
- Someone who is proficient with colors/paint: 14 percent

These findings suggest at least two things. First, the public defines interior designers more by the nature of their work than by their qualifications. Second, it appears the public perceives “taste and a sense of style” as necessary attributes for interior designers as much as some level of professional training and experience. Therefore, since the public appears to think not primarily about qualifications but about the nature of the work or other attributes, the use of “interior designer” by people with varying credentials appears not to be misleading.

But these sparse results do not make for a firm conclusion. Therefore, we polled people to find out which definition most closely matches their understanding of the title “interior designer.” We sought to answer two questions: (1) Does the title “interior designer” inherently mean someone with certain qualifications, specifically, the Three Es?, and (2) Is it misleading for design practitioners to call themselves “interior designers” if they do not have the Three Es?

We complemented this poll with an analysis of seven of the leading interior design publications widely accessed by the general public.<sup>9</sup> We wanted to know whether writers and editors use the title “interior designer” to mean a person with education, experience and examination qualifications, or whether they simply use the title to describe people who practice interior design. We also wanted to see whether writers and editors take into account particular state regulations when using the title “interior designer” to describe practitioners in those states.

In both phases of this research, we sought to test the “misleading” assertion by seeing which definition of “interior designer”—the Three E credentials versus nature of work performed—more closely matches the public’s understanding of the title “interior designer” and its use in industry publications. Because we used published interior design articles and a poll design that masked its topic and intent, either definition could have prevailed.

## Asking the Public

To examine the public's understanding of the title "interior designer," we polled 1,400 randomly chosen participants in Ohio and Texas—700 in each state. We were primarily interested in Texas, which has a title act like those in Oklahoma and Connecticut, but included Ohio residents as a control group. Ohio does not have a titling law.

This was an important aspect of the poll because it could be that people in Texas became accustomed—or "conditioned"—to think of interior designers as possessing the Three Es *because of Texas'* titling law, not because the term inherently carries that meaning. To rule out that possibility, it was important to compare Texas' results to a state without a titling law. As it turned out, there were no significant differences between the two groups' responses. Therefore, to take advantage of the larger sample size, all results in this report are based on the total sample of 1,400 taken residents of Texas and Ohio. See Appendix A for details from this analysis.

The poll was conducted by Strategic Vision in March 2008. The Institute for Justice developed 41 total questions across five occupations: interior designer, computer scientist, priest, auto mechanic and chef. Including multiple occupations enabled us to see if perceptions about interior design differ from other common occupations. It also ensured that respondents were not "tipped off" that the true intent of the poll was to measure perceptions of the interior design industry, which could skew results.<sup>10</sup>

For each occupation, we first gave respondents a scenario in which they meet or see a particular occupational practitioner. For example, the interior design scenario read:

First, suppose that you are at a social event in your community and someone hands you his business card indicating that he is an interior designer. Based on that business card, please tell me to what extent you agree or disagree with the following statements.

We then asked respondents how much they agreed or disagreed with eight or nine statements about the person they just met or saw. Some of the statements discussed qualifications, such as the Three Es, while others focused on what the practitioner does. For example, a statement addressing the qualifications of the interior designer with the business card read, "I believe the interior designer successfully passed a national interior design test prior to opening a business." A statement about that person's work read, "I believe the interior designer coordinates rooms using furniture, fixtures, color, and so forth."

The goal was to see what people really think of the term "interior designer" when they come into contact with someone using the title: Do people more closely identify the title with a person's qualifications or with the type of work that person does? In other words, do they think, "Here is a person who has educational training, has completed an apprenticeship and has passed an examination in interior design," or do they think, "Here is a person who designs interiors"?

We also wanted to test whether people associate the *specific* qualifications required by titling laws in Texas, Connecticut, Oklahoma and other states with the title "interior designer." Perhaps people think of qualifications, but they think of the wrong ones. So we included in the

questions the actual requirements from Texas law, but we also included false requirements, such as “I believe the interior designer completed some minimum number of design projects prior to being able to open a business.” No state has this requirement to be or to be called an interior designer.

Including such false requirements enabled us to see whether people can distinguish the specific qualifications backed by ASID and other cartelizers from fake credentialing requirements. If not, then these state-mandated requirements are not as well-grounded in the very definition of “interior designer” as ASID and others who promote titling laws contend.

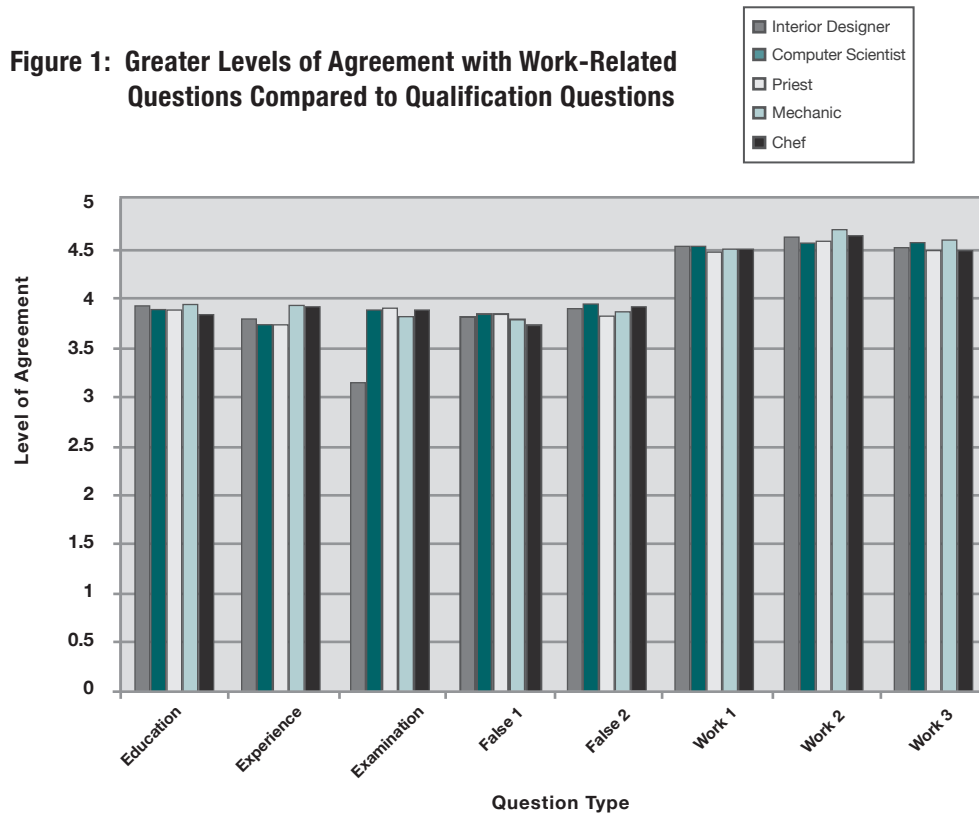
Do people think, “Here is a person who has educational training, has completed an apprenticeship and has passed an examination in interior design,” or do they think, “Here is a person who designs interiors?”

Finally, so that we could compare responses about the title “interior designer” with other occupations, the questions for each of the other four occupations—computer scientist, priest, auto mechanic and chef—mirrored those for interior designers. Each occupation had a question about education, experience and examination, each had a few other possible qualifications, and each had questions about descriptions of work these practitioners perform.<sup>11</sup> See Appendix B for further details about the survey methods.

## Results

Table 2 shows the poll participants' impressions of the qualifications and nature of the work for all five occupations we tested. Participants could answer on a six-point scale, with six as "strongly agree" and one as "strongly disagree." The higher the average response, the more people associate that characteristic with the title.

Figure 1 illustrates the same results. For all occupations in the poll, impressions about qualifications, including false qualifications, cluster between 3.5 and 4, which is to say between "somewhat disagree" and "somewhat agree." Meanwhile, answers to work-related questions are all above 4.5 ("somewhat agree")—approaching a 5 score of "agree." As the figure makes clear, people identify these occupational titles more with the nature of the work than with various qualifications—real or imagined, regulated or unregulated. Statistical analysis backed this up and revealed a number of more detailed findings.



**Table 2: Poll Respondents' Impressions of Qualifications and Nature of Work for Occupational Titles: Interior Designer, Computer Scientist, Priest, Mechanic and Chef**

1=strongly disagree; 2=disagree; 3=somewhat disagree; 4=somewhat agree; 5= agree; 6=strongly agree

Questions	Average Response *	Standard Deviation **	Confidence Intervals ***
<i>Interior Designer Introduction: First, suppose that you are at a social event in your community and someone hands you his business card indicating that he is an interior designer. Based on that business card, please tell me to what extent you agree or disagree with the following statements.</i>			
1. I believe that the interior designer completed a two-year college degree in interior design.	<b>3.97</b>	1.441	±.09
2. I believe that the interior designer completed a four-year college degree in interior design.	<b>3.91</b>	1.026	±.06
3. I believe the interior designer has at least two years of experience as a designer.	<b>3.80</b>	1.063	±.06
4. I believe the interior designer successfully passed a national interior design test prior to opening a business.	<b>3.15</b>	1.368	±.08
5. I believe the interior designer completed some minimum number of design projects prior to being able to open a business.	<b>3.82</b>	1.166	±.07
6. I believe the interior designer had to create a portfolio of work for others to see prior to being able to open a business.	<b>3.89</b>	1.185	±.07
7. I believe the interior designer coordinates rooms using furniture, fixtures, color and so forth.	<b>4.53</b>	1.002	±.06
8. I believe the interior designer makes suggestions about the plan and décor of a room.	<b>4.64</b>	.969	±.06
9. I believe the interior designer alters the appearance of space according to the wishes of a client.	<b>4.52</b>	.975	±.06
<i>Computer Scientist Introduction: Now suppose for a moment you are sitting next to someone on a plane who introduces herself as a computer scientist. Based on that introduction, please tell me to what extent you agree or disagree with the following statements.</i>			
10. I believe the computer scientist completed a four-year college degree.	<b>3.91</b>	1.473	±.09



11. I believe the computer scientist passed a state computer scientist examination.	<b>3.90</b>	.991	±.06
12. I believe the computer scientist completed an internship with a technology company.	<b>3.75</b>	1.009	±.06
13. I believe the computer scientist attends annual technology classes to stay current in the field.	<b>3.85</b>	1.195	±.07
14. I believe the computer scientist passed a security background check.	<b>3.94</b>	1.152	±.07
15. I believe the computer scientist works with software and hardware.	<b>4.54</b>	1.051	±.06
16. I believe the computer scientist programs information technology.	<b>4.57</b>	1.013	±.06
17. I believe the computer scientist works on systems and networks.	<b>4.55</b>	.943	±.06
<i>Priest Introduction: Now suppose you were standing on a street corner next to a priest wearing a clerical collar. Based on seeing the priest, please tell me to what extent you agree or disagree with the following statements.</i>			
18. I believe the priest completed a graduate seminary degree.	<b>3.91</b>	1.399	±.09
19. I believe the priest passed a national clergy examination.	<b>3.93</b>	1.035	±.06
20. I believe the priest has several years of experience working in a church.	<b>3.73</b>	.994	±.06
21. I believe the priest is certified by the state to perform weddings and other civil ceremonies.	<b>3.84</b>	1.169	±.07
22. I believe the priest completed training on how to perform counseling services.	<b>3.78</b>	1.081	±.07
23. I believe the priest leads religious services.	<b>4.48</b>	1.004	±.06
24. I believe the priest performs religious rites in his church, such as confession, baptisms and funerals.	<b>4.59</b>	.947	±.06
25. I believe the priest leads a church.	<b>4.52</b>	.958	±.06
<i>Mechanic Introduction: Now suppose for a moment you are stopped at a red light behind a truck advertising the truck's owner as an auto mechanic. Based on seeing the ad on that truck, please tell me to what extent you agree or disagree with the following statements.</i>			
26. I believe the mechanic completed a two-year college degree.	<b>3.95</b>	1.422	±.09
27. I believe the mechanic completed an apprenticeship program.	<b>3.95</b>	1.064	±.06

28. I believe the mechanic completed training in automotive technology.	<b>3.81</b>	1.045	±.06
29. I believe the mechanic passed a state auto mechanics test.	<b>3.83</b>	1.196	±.07
30. I believe the mechanic is bonded by the state.	<b>3.87</b>	1.174	±.07
31. I believe the mechanic repairs cars and trucks.	<b>4.52</b>	1.001	±.06
32. I believe the mechanic provides routine automotive maintenance.	<b>4.69</b>	.953	±.06
33. I believe the mechanic can provide inspections of used cars for customers.	<b>4.57</b>	.936	±.06
<i>Chef Introduction: Now suppose you saw a restaurant advertisement featuring a chef as its spokesperson. Based on seeing that ad, please tell me to what extent you agree or disagree with the following statements.</i>			
34. I believe the chef graduated from culinary or cooking school.	<b>3.86</b>	1.442	±.09
35. I believe the chef has a minimum number of years of cooking experience.	<b>3.93</b>	1.030	±.06
36. I believe the chef completed an internship at a noteworthy restaurant.	<b>3.71</b>	1.017	±.06
37. I believe the chef passed a state chef examination.	<b>3.88</b>	1.167	±.07
38. I believe the chef is certified by the county after passing a health and safety examination.	<b>3.93</b>	1.135	±.07
39. I believe the chef creates decorative food displays.	<b>4.52</b>	1.011	±.06
40. I believe the chef runs a restaurant kitchen.	<b>4.63</b>	1.007	±.06
41. I believe the chef plans menus.	<b>4.50</b>	.968	±.06

\*Statistical mean.

\*\*This is a measure of how much the answers varied across participants. The lower the number, the more consistent the answers.

\*\*\*This is similar to margin of error, where the averages reported in the table could lie somewhere between the plus or minus figures.

## "Interior Designers" Design Interiors

The poll results indicate that people think an interior designer is, first and foremost, someone who does the work of an interior designer. When people encounter someone calling herself an interior designer, they are more likely to think she plans the design or décor of a room than to assume that she has various qualifications such as education, experience or examination. Similarly, in the public mind, the titles computer scientist, priest, auto mechanic and chef are more

tightly linked to the work these people do than to any qualifications they might have.

Figure 1 illustrates this finding, and additional statistical tests confirm it. For each occupation, we compared responses to questions addressing qualifications to those addressing the nature of work. In every case, people more strongly identified a title by the nature of the work than qualifications, and the results were statistically significant across the board. Appendix C lists the statistical results for each comparison.

This is entirely consistent with the experience of many working designers. As Maria Gore, a designer in Oklahoma, says:

Customers define me by the nature of the work. In conversation, people don't ask what I learned in class. They ask about colors and placement and furniture style. And they want to make sure I can design these things to complement one another. They are not looking for how many degrees you have.

Poll results indicate that people think an interior designer is, first and foremost, someone who does the work of an interior designer.

Cindy Hernandez from Connecticut agrees: "Only one person has ever asked about a design degree. Everyone else has engaged me on personality, knowledge and the ideas I come up with when we meet. People just don't ask about qualifications."

### "Interior Designer" Does Not Mean the Three Es

Moreover, poll results reveal that the title "interior designer" does not indicate to the public someone who has specific qualifications, namely the Three Es required by Texas, Connecticut, Oklahoma and other states to legally use the title. Indeed, respondents were just as likely to think that "interior designer" means someone who has completed a minimum number of design projects or who has developed a portfolio—the false qualifications—as they were to think "interior designer" means someone who has completed the Three Es.

Figure 1 illustrates that for each occupation in the poll the "false" qualifications scored the same as education, experience and examination. (Of course, for occupations other than interior designer, none of the qualifications, including the Three Es, are required by state law, so they are all false in that sense. For these occupations, by "false" we simply mean qualifications other than the Three Es.) It appears that there is nothing special about the Three Es such that when people hear a title like "interior designer," they think, "This is a person who has education, experience and has passed an exam in interior design"—instead of other possible qualifications that we simply made up.

Statistical analysis backs this up. For interior design, we compared participants' responses to actual, state-mandated qualifications (the Three Es) to those addressing the false qualifications (completing a certain number of projects and creating a portfolio). We found that people are just as likely to think an interior designer has the qualifications we made up as they are to think designers have achieved a certain level of education and experience. And people are *more* likely to assume an interior designer has our fake qualifications than to assume she has passed a national interior design exam. All results were statistically significant. Appendix C provides more detailed findings.

If "interior designer" means the "Three Es," as ASID and others backing titling and licensing laws claim, then people should be able to distinguish those qualifications from the false ones. But they do not. Moreover, if ASID were correct, then people would also consistently identify each of the Three Es with the term "interior designer." In other words, when people think of "interior designer" they would think of each element of the Three Es—education, experience and examination—in equal measure.

But statistical analysis shows that this is not the case. We looked to see if answers to questions about education, experience and examination were correlated for interior design or any of the occupations we studied. Put another way, are education, experience and examination linked in people's minds when they hear these titles?

As Table 3 shows, the answer is no. Table 3 gives measures of the correlation, or link, between the Three Es for each occupation. Negative measures mean the items are not linked; positive measures mean they are. The number indicates the strength of the link (or lack of one): +1.0 is a strong positive correlation, while -1.0 is a strong negative correlation. Here, the correlation measures are extremely small, and none come close to showing a strong or even moderate link between qualifications. This demonstrates that the public does not think of the Three Es as a package that interior designers (or the other occupations we tested) inherently possess.

Poll results reveal that the title "interior designer" does not indicate to the public someone who has *specific* qualifications, namely the Three Es.

**Table 3: Links Between Three Es**

Questions	Correlations
Interior Design	
Education to Experience	.02
Education to Examination	-.009
Experience to Examination	.008
Computer Scientist	
Education to Experience	.042
Education to Examination	-.022
Experience to Examination	.062
Priest	
Education to Experience	.048
Education to Examination	.058
Experience to Examination	-.001
Mechanic	
Education to Experience	.056
Education to Examination	-.004
Experience to Examination	.021
Chef	
Education to Experience	-.032
Education to Examination	.000
Experience to Examination	.005

### Interior Design Is No Different Than Unregulated Occupations

Finally, compared to *unregulated* occupations, people are even less likely to think of two of the Three Es when they hear the title “interior designer.” To find this out, we compared responses to the questions about education, experience and examination across occupations.

So, for example, we looked to see if people are as likely to think all five occupations have some kind of educational qualification. That turned out to be the case—even though only for interior designers is such a requirement enforced by law in some states.

However, the story was different for experience and examination. People are *more* likely to believe that chefs and mechanics have met experience requirements than they are to believe that interior designers have. And people are *more* likely to assume that *all* the unregulated occupations have passed an occupational exam than to assume interior designers have. For more detailed results, see Appendix C.

These results do not fit with pro-regulation groups’ definition of “interior designer” as someone with the Three Es or their contention that those qualifications must be enforced

through state law in order to prevent people from being misled. On the contrary, they suggest that the public sees no difference between interior designers and unregulated occupations when it comes to whether practitioners have certain qualifications. So why have the regulations?



## Conclusions

Is it misleading for design practitioners to call themselves “interior designers” if they do not have the Three Es? Results from this poll indicate not.

These findings reveal that the public perceives interior designers (and other occupations in the survey) more by the nature of the work they do than the qualifications they possess. And when asked directly about those qualifications, respondents demonstrated little consistency in their beliefs, further challenging the idea that the term “interior design” carries some inherent meaning based on specific qualifications.

Again, the experience of working designers supports this finding. As Jane Speroff, a designer in Connecticut, describes:

People want to see my work; they want to see my portfolio. They want to know about my business model—payment schedule, timing, what I will handle, what the experience will be. I have never been asked about my degrees, I have never been asked if I am certified, and I have certainly never been asked if I passed a national exam.

Amy Williamson concurs:

I receive most of my customers through word of mouth. Very few times have I been asked about my education—in six years, maybe 10 times, maybe. In my field, the work speaks volumes. People don’t care about my education; they just care about my work.

In fact, the public is plainly *not* misled by people like Jane, Cindy, Maria and Amy—who lack the Three Es but actually design interiors—calling themselves interior designers.

Finally, when the interior design results are compared to other occupations in the poll, none of which are regulated, the findings are even clearer. It is no more misleading for interior designers without the Three Es to identify themselves as interior designers than it is for mechanics, priests, chefs or computer scientists to use their titles to describe what they do. In fact, the public is plainly *not* misled by people like Jane, Cindy, Maria and Amy—who lack the Three Es but actually design interiors—calling themselves interior designers.

## Reviewing Industry Sources

Just as the public's perception of the title "interior designer" focuses more on the nature of the work than the Three Es, writers and editors of the nation's leading interior design publications appear interested only in the practitioners' work when using the title "interior designer." This means that people intimately familiar with the industry—interior design magazine writers and editors—also define it by the work designers do rather than the Three Es.

We found this by studying how writers in interior design magazines used the title "interior designer" when describing practitioners who live in states with different regulations and who have diverse levels of education, experience and licensure status. We chose seven leading interior design magazines (see Table 4), based on ASID research<sup>12</sup> and circulation rates,<sup>13</sup> as well as consultation with several interior designers. Such publications represent a particularly rich source of data given their widespread popularity and influence both in and outside of the interior design industry.<sup>14</sup> The time period covered in our analysis included all of 2007 and the first three months of 2008.

**Table 4: Publications Used in the Analysis of Interior Design Magazines**

Publication	Circulation Rates	Number of Designers
Southern Living	2,800,000	23 (4.1%)
Country Living	1,728,962	16 (2.9%)
Traditional Home	966,173	102 (18.3%)
House Beautiful	869,825	78 (14%)
Architectural Digest	812,892	201 (36%)
Metropolitan Home	600,000	66 (11.8%)
Veranda	481,234	72 (12.9%)
Totals	8,259,086	558

From each magazine we gathered all articles that featured interior designers and their work, for a total of 558 designers. Table 4 indicates the number of designers drawn from each magazine. We then counted how often a particular title was used to describe the practitioner(s) in the article (calling the person either "interior designer" or another title, such as decorator) and noted each designer's state.<sup>15</sup> From the 558 designers, we drew a random sample of 254 for which we identified each designer's education and years of experience, licensure status and the type of regulation in his or her state. See Appendix D for more details about this analysis.

## Results

Writers and editors of design publications appear to pay no attention to the education or experience level of designers when using the title “interior designer” to describe practitioners.

As Table 5 indicates, writers overwhelmingly use the title “interior designer” no matter the education level of the person they are describing. We measured designers’ education in two categories: less than a two-year degree and two-year degree or more. Almost 88 percent of designers we sampled from industry publications hold a two-year degree or more, and 12.5 percent hold a two-year degree or less. Nonetheless, industry publications overwhelmingly apply the title “interior designer” to both groups, even though in all regulated states having less than a two-year degree would be insufficient to be or to be called an interior designer. If industry publications considered only those who have the Three Es to be “interior designers,” there would have been a greater number of designers with less than a two-year degree who were labeled as something other than “interior designer,” but this clearly was not the case.

We also examined these results with statistical tests designed to measure the chance that writers adjust their use of the title based on designers’ level of education. Results indicated no significant relationship, confirming that writers appear interested only in designers’ work rather than their education. See Appendix E for detailed statistical results.

**Table 5: Use of “Interior Design” Title Regardless of Education Level**

		Education	
		Less than a 2-year degree	4-year degree or more
Title	Other (such as “interior decorator”)	1	6
	“Interior designer”	14	99

\* Totals differ between Tables 5, 6 and 7 due to missing data.

The same held true for experience. We measured experience by the number of years a designer had been practicing. The designers in this sample had an average of 21.7 years of experience. Those identified in industry publications as interior designers averaged 22 years of experience, and those identified with some other title averaged 17 years of experience. Statistical testing indicated no significant difference,<sup>16</sup> which, practically speaking, means that although designers in the “other” category had fewer years of experience, writers and editors do not take experience into account when deciding whom to call an “interior designer.”

Writers also seem to ignore designers’ licensure status—whether they have state permission to use the title “interior designer” or a related title or to even practice at all—when using the title “interior designer.”<sup>17</sup> Ninety-two percent of designers in this sample are not licensed in their respective states. But as Table 6 indicates, industry publications still call the vast majority

of them “interior designers.” Statistical testing confirmed that, as with designer education and experience, writers and editors of design publications appear to pay no attention to designers’ licensure status when describing them as interior designers. See Appendix E for detailed results.

**Table 6: Use of “Interior Design” Title Regardless of Licensure Status**

		License	
		Not licensed	Licensed
Title	Other (such as “interior decorator”)	6	0 <sup>18</sup>
	“Interior designer”	159	14

\*Totals differ between Tables 5, 6 and 7 due to missing data.

Finally, consistent with education, experience and licensure status, writers and editors appear uninterested in a state’s regulation when using a title to describe a designer’s work. Table 7 indicates writers more often use “interior designer” to describe practitioners regardless of regulation.<sup>19</sup> Were industry publications concerned about these regulations, they would have used the title “interior designer” more often in states that bar anyone but those who have the Three Es from using the title “interior designer” (or “certified interior designer” or “registered interior designer”). Instead, interior design magazine writers use the title “interior designer” to describe those who design interiors, regardless of the states’ requirements.

**Table 7: Use of “Interior Design” Title Regardless of State Regulations**

		Regulation		
		None	Certification/ Registration	Interior designer
Title	Other (such as “interior decorator”)	7	3	6
	“Interior designer”	110	143	42

\* Totals differ between Tables 5, 6 and 7 due to missing data.

## Conclusions

Do writers and editors use the term “interior designer” based on the Three Es or do they use it to describe people who design interiors? Results from our analysis of more than 500 magazine articles indicate that writers and editors from the leading interior design publications unequivocally use “interior designer” to describe practitioners based on their work, not based on the Three Es.

These findings are particularly striking given the “insider” knowledge these writers and editors possess about interior design. In other words, given their intimate knowledge of the industry, it is reasonable to expect these writers and editors to know of the various regulations governing the use of titles for interior designers and to recognize the alleged “need” for such regulation in order to prevent the public from being confused or misled. But our results indicate that these writers and editors either do not agree with the asserted need for titling regulation or simply do not care.

“Interior designer” is used pervasively throughout leading interior design publications to describe people who design interiors, without regard to the Three Es or to the licensed or unlicensed status of the designer.

And even when a particular design practitioner makes it a point of calling herself a “decorator” to avoid running afoul of state law, editors still use “designer” or “interior designer” to describe her. Jane Speroff writes articles for a home and garden newspaper insert, deliberately using the title “interior decorator” to describe herself. However, in photo captions and other editorial content, the paper describes her as an interior designer.

So both our research findings and the experience of practitioners undermine the “misleading” argument put forth by interior design cartelizers. If industry writers and editors thought using “interior designer” for practitioners without the Three Es might mislead readers, they presumably would adjust their use of the title accordingly. As these results indicate, however, they do not. “Interior designer” is used pervasively throughout leading interior design publications to describe people who design interiors, without regard to the Three Es or to the licensed or unlicensed status of the designer.

## Who Is Misleading Whom?

Taken together, the results from the poll and the analysis of industry publications point to a clear conclusion: It is not misleading for interior designers who lack the Three Es to use the title when they do in fact design interiors for a living. As with priests and mechanics, chefs and computer scientists, interior designers who use the title to describe themselves to the public are doing so based on the nature of their work. Therefore, we find no evidence that designers who lack state approval mislead the public by using the title “interior designer.”

Indeed, it may even be that titling laws themselves are misleading, deceptive and confusing. The passage of titling laws is typically a messy political process attended by power brokers, lobbyists, influence and compromises. The latter in particular typically results in laws that exempt, or “grandfather,” entire classes of individuals from the Three E requirements so long as they have a certain amount of work experience.

In Texas alone, 84 percent of state-approved interior designers were grandfathered-in without having to meet the Three E mandates.<sup>20</sup> The practical implication is that consumers who know about the titling law requirements and trust that anyone using the title “interior designer” possesses certain qualifications (consistent with the ostensible intent of the law) are in fact misled by the very law allegedly designed to protect them.

Of course, predicting the effects of titling laws relies on the large assumptions that (a) regulations like these lead to greater consumer benefit and protection and (b) consumers know or care about the Three Es. The first of these we discredited in *Designing Cartels*, and to date cartelizers have provided no evidence to the contrary. The second point is proved false every day in thousands of interior design establishments across the country. As designers like Jane, Cindy, Maria and Amy can attest, interior design consumers care about a practitioner’s design style, ideas, work samples, personality and cost.

“Potential customers consistently ask about only a few things,” says Maria Gore. She continues:

They want to know about price, which is the primary question. They want to know what services I can offer them, like floors, draperies and furniture. And they want some design help. How do I layout this room? How do I place furniture? Should I move these cabinets? What color would look good with this sofa? Where should I put the kitchen island? No one has ever asked if I passed a test. A few people have asked about certification, and rarely will they ask about education.

To that, Jane Speroff adds the importance of relationships:

Because potential customers want to trust me to make the right decision for their home and lifestyle, they are looking for someone who fits their personality and lifestyle. That relationship is established when we first meet by how I discuss my business model. It is created when they give me a tour of their home and I am personal and candid about ideas and what I can and can’t do. They develop some sense of trust when they see my portfolio and when they talk to references. It’s much like any other relationship where you do what you say you will do and deliver



what you say you will deliver.

And although the cartelizers claim to see important distinctions between titles, the real-world experience of practitioners demonstrates otherwise. “In all my literature I call myself an interior decorator because of the titling law,” says Speroff, “but when clients refer to me in the second person, they call me a designer, like ‘I am with my designer, can I call you back?’”

According to Cindy Hernandez:

People aren’t concerned about the designer/decorator distinction. No one has ever mentioned that distinction. They want to talk about their project and what to do with a room. First impressions count, and if you don’t connect with someone, they won’t become your client, no matter what you call yourself or how many letters you tag on your name.

These designers and their customers understand something ASID and other pro-regulation forces do not: Designers design, and while the Three Es may be useful for some, they do not define a designer in the minds of the public or in leading industry publications and should not be transformed into legal requirements that keep people out of business or from honestly communicating what they do.

## Appendix A

### Analysis of Poll Results Between States

As addressed in the report, differences in the poll questions were examined between Texas and Ohio, and only four of the 41 questions showed significant differences (questions 2, 5, 10 and 34). Table A1 includes the averages, standard deviations (SD) and confidence intervals (CI) for all questions between the states. The asterisks indicate the results for those questions showing significant differences.

**Table A1: Poll Results Disaggregated by State**

Question	OH			TX		
	Mean	SD	CI	Mean	SD	CI
1. I believe that the interior designer completed a two-year college degree in interior design.	4.04	1.382	±.12	3.89	1.498	±.13
2. I believe that the interior designer completed a four-year college degree in interior design.*	4.00	1.047	±.09	3.81	0.996	±.09
3. I believe the interior designer has at least two years of experience as a designer.	3.79	1.114	±.09	3.81	1.006	±.09
4. I believe the interior designer successfully passed a national interior design test prior to opening a business.	3.15	1.390	±.12	3.14	1.345	±.12
5. I believe the interior designer completed some minimum number of design projects prior to being able to open a business.**	3.90	1.191	±.10	3.73	1.133	±.10
6. I believe the interior designer had to create a portfolio of work for others to see prior to being able to open a business.	3.93	1.188	±.10	3.85	1.182	±.10
7. I believe the interior designer coordinates rooms using furniture, fixtures, color and so forth.	4.56	1.014	±.09	4.50	0.989	±.09
8. I believe the interior designer makes suggestions about the plan and décor of a room.	4.66	.968	±.08	4.62	0.971	±.09
9. I believe the interior designer alters the appearance of space according to the wishes of a client.	4.52	.961	±.08	4.52	0.992	±.09
10. I believe the computer scientist completed a four-year college degree.***	4.01	1.384	±.12	3.80	1.557	±.14
11. I believe the computer scientist passed a state computer scientist examination.	3.91	1.016	±.09	3.90	0.964	±.08
12. I believe the computer scientist completed an internship with a technology company.	3.75	1.049	±.09	3.75	0.966	±.08

13. I believe the computer scientist attends annual technology classes to stay current in the field.	3.80	1.159	±.10	3.91	1.232	±.11
14. I believe the computer scientist passed a security background check.	3.98	1.183	±.10	3.90	1.117	±.10
15. I believe the computer scientist works with software and hardware.	4.53	1.061	±.09	4.55	1.041	±.09
16. I believe the computer scientist programs information technology.	4.55	1.012	±.09	4.60	1.015	±.09
17. I believe the computer scientist works on systems and networks.	4.54	.946	±.08	4.56	0.941	±.08
18. I believe the priest completed a graduate seminary degree.	3.94	1.339	±.11	3.89	1.463	±.13
19. I believe the priest passed a national clergy examination.	3.90	1.011	±.09	3.96	1.06	±.09
20. I believe the priest has several years of experience working in a church.	3.72	1.050	±.09	3.74	0.931	±.08
21. I believe the priest is certified by the state to perform weddings and other civil ceremonies.	3.85	1.176	±.10	3.83	1.163	±.10
22. I believe the priest completed training on how to perform counseling services.	3.72	1.037	±.09	3.84	1.124	±.10
23. I believe the priest leads religious services.	4.47	.981	±.08	4.49	1.028	±.09
24. I believe the priest performs religious rites in his church, such as confession, baptisms and funerals.	4.62	.985	±.08	4.56	0.905	±.08
25. I believe the priest leads a church.	4.49	.935	±.08	4.56	0.981	±.09
26. I believe the mechanic completed a two-year college degree.	4.00	1.387	±.12	3.90	1.458	±.13
27. I believe the mechanic completed an apprenticeship program.	3.94	1.044	±.09	3.95	1.086	±.10
28. I believe the mechanic completed training in automotive technology.	3.79	1.078	±.09	3.83	1.009	±.09
29. I believe the mechanic passed a state auto mechanics test.	3.84	1.218	±.10	3.81	1.173	±.10
30. I believe the mechanic is bonded by the state.	3.94	1.178	±.10	3.81	1.168	±.10
31. I believe the mechanic repairs cars and trucks.	4.47	1.025	±.09	4.58	0.974	±.09
32. I believe the mechanic provides routine automotive maintenance.	4.69	.916	±.08	4.69	0.992	±.09
33. I believe the mechanic can provide inspections of used cars for customers.	4.60	.936	±.08	4.55	0.936	±.08

34. I believe the chef graduated from culinary or cooking school.****	3.98	1.352	±.12	3.73	1.524	±.13
35. I believe the chef has a minimum number of years of cooking experience.	3.92	1.006	±.09	3.95	1.056	±.09
36. I believe the chef completed an internship at a noteworthy restaurant.	3.66	1.047	±.09	3.77	0.981	±.09
37. I believe the chef passed a state chef examination.	3.92	1.180	±.10	3.84	1.152	±.10
38. I believe the chef is certified by the county after passing a health and safety examination.	3.89	1.125	±.10	3.97	1.145	±.10
39. I believe the chef creates decorative food displays.	4.49	1.004	±.08	4.55	1.018	±.09
40. I believe the chef runs a restaurant kitchen.	4.64	.995	±.08	4.61	1.02	±.09
41. I believe the chef plans menus.	4.48	.959	±.08	4.52	0.977	±.09

\* $t=2.85$ ,  $p=.004$ ; \*\*  $t=2.35$ ,  $p=.019$ ; \*\*\*  $t=2.29$ ,  $p=.022$ ; \*\*\*\*  $t=2.72$ ,  $p=.007$

We further explored these differences to determine if the states should be analyzed separately or the differences controlled for. To do so, we examined the relationship between state and results from the four questions using Cramer's V, Contingency Coefficients, Goodman and Kruskal tau, Uncertainty Coefficients and eta-squared ( $\eta^2$ ).

Cramer's V and Contingency Coefficient both indicate the strength and significance of the relationship between the row and column variables of a cross tabulation. The range of values for these tests span 0 to 1 and can be interpreted similarly to correlation coefficients, where small numbers indicate weak relationships and large numbers indicate strong relationships. These are symmetrical measures, meaning they measure only the relationship between two variables, and do not in any way suggest cause and effect.

Goodman and Kruskal tau and Uncertainty Coefficient, however, act as directional measures, meaning one variable is treated as a cause (i.e., independent) and the other as an effect (i.e., dependent). The values for each test can range from 0 to 1 and provide some indication of how the independent variable can predict the dependent variable. Unlike the prior two tests, however, the values for Goodman and Kruskal tau and Uncertainty Coefficient are interpreted as percentages. For example, beginning with the Goodman and Kruskal tau, this means the state variable only predicts 0.2 percent of question 2 (see Table A2). Likewise, the Uncertainty Coefficient value indicates the state variable only predicts 0.6 percent of question 2.

The final test examines how much variability in a dependent variable can be explained or accounted for by the independent variable. Generally, if the eta-squared value is large, one can conclude that the independent and dependent variables are strongly related. Eta-squared is reported in decimal form and interpreted as a fraction. Therefore an  $\eta^2 = .367$  means that 36.7

percent of the variability in the dependent variable can be explained by the independent variable.

For the purposes here, all these tests provide an indication of whether the significant differences for questions 2, 5, 10 and 34 are substantial enough such that some further action is warranted, such as analyzing the states separately. Results below indicate this was not the case. Although the Goodman and Kruskal tau, Uncertainty Coefficients, Cramer's V and Contingency Coefficients for almost all questions indicate significance, the test values are very small, meaning the relationship between state and responses to the questions is so minimal as not to warrant action. This is further confirmed by the tiny  $\eta^2$  values.

**Table A2: Relationships between State and Questions 2, 5, 10 and 34**

	Q2		Q5		Q10		Q34	
	Value	p	Value	p	Value	p	Value	p
Goodman and Kruskal tau*	.002	.158	.002	.026	.002	.058	.001	.013
Uncertainty Coefficients*	.006	.004	.004	.048	.004	.014	.006	.002
Cramer's V**	.127	.005	.104	.050	.118	.014	.137	.002
Contingency Coefficients**	.126	.005	.103	.050	.117	.014	.136	.002
Eta-squared	.009		.004		.005		.007	

\*Directional measures, \*\*Symmetrical measures, Questions 2, 5, 10 and 34 as dependent

For this reason, Texas and Ohio respondents were considered statistically equivalent and the data combined for the analyses. However, to confirm this even further, we analyzed Ohio and Texas data separately. Trends in the state specific data adhered to those in the combined sample reported in the main text.

## Appendix B

### Further Details on Polling Methods

#### Demographics and Weighting

All poll participants were at least 18 years of age. Table B1 includes descriptive statistics on the respondents' demographic characteristics. Given the sampling design, we analyzed the results using weights. Weighting is a process whereby data points are mathematically emphasized or de-emphasized to make sample data more accurately represent the population. Weighting would not be necessary if the sample were a true simple random sample and, therefore, represented the entire population under consideration. Although we began with randomly generated telephone numbers, the sample falls short of true randomness largely because some demographic groups are easier to reach over the phone than others. Such disproportions could create a biased sample and somewhat spurious results. The standard and accepted procedure to address this problem is to apply weights to match the estimates provided by the U.S. Census for gender, age and race, all of which we did.

**Table B1: Sample Demographics**

Variable	OH	TX	Total Sample
Race/Ethnicity			
African-American	10.7	8.5	9.7
Asian	1.5	2.7	2.1
Hispanic	2	24.5	12.9
White	84.9	54.6	70.3
Other	.8	9.7	5.1
Age (Mean)	46.38 years	43.19 years	44.84 years
Sex			
Female	52	50.7	51.4
Male	48	49.3	48.6
Income			
\$0-\$15,000	1.5	.5	1
\$15,001-\$25,000	4.9	5.4	5.1
\$25,001-\$50,000	65.6	87.6	76.2
\$50,001-\$75,000	23.5	5	14.6
\$75,001-\$100,000	4.1	.7	2.4
More than \$100,000	.5	.8	.6

#### Controlling for Possible Bias

We also asked whether the poll respondents or someone within their respective households practiced the various occupations in the poll. These questions were included to control for the potential of bias in responses due to the participants' connection to the respective occupations.



However, the numbers of those associated with the various occupations were so small (interior design=8, computer scientist=7, priest=2, mechanic=11, chef=1), controlling for these data was unnecessary.

### Choosing Other Occupations

To choose the specific occupations on this poll, other than interior design, we referred to a list of occupations distributed across an occupational prestige scale.<sup>21</sup> Occupational prestige scaling has been used since the 1920s to rank and classify occupations.<sup>22</sup> Since then, it has become an established and often-used procedure in the study of occupations both in the U.S. and internationally,<sup>23</sup> including research on interior design.<sup>24</sup> For example, one study used occupational prestige scales to determine how the design professions are perceived relative to a number of other professions.<sup>25</sup>

Most commonly, occupational prestige scaling asks survey respondents to place various occupations in rank order based on perceived status, which can include education, pay, training and other factors. For ease of reporting, occupations are reported on a scale of 0-100.<sup>26</sup> Interior designers are widely reported at an intermediate level, generally with a score of 47 or 48.<sup>27</sup> For comparison with another design occupation, architects have a score of 73.<sup>28</sup>

We chose comparison occupations distributed throughout the scale, two higher than interior design and two lower: Computer scientist=74, Priest=69, Interior designer=47, Auto mechanic=40 and Chef=31. Other than interior designer, the other occupations are overwhelmingly unregulated, except for auto mechanic in just a few states.

### Procedures

A draft of the poll was piloted with a small sample of respondents to measure question clarity and survey length. We made minor changes to some question wording before data collection. Strategic Vision, an Atlanta-based national polling firm, gathered the data. As part of their services, Strategic Vision took the poll developed by us and converted it to a script used by data collectors. They collected all data in the latter half of March 2008. The poll took approximately five to ten minutes to complete by phone.

### Analysis

One issue regarding the analyses should be noted. The data from the poll are technically measured on an ordinal scale (i.e., on a scale of one to four) as opposed to an interval or a ratio scale (otherwise called continuous). Ordinal data typically require that analyses be completed with non-parametric tests, because parametric tests, like t-tests and ANOVA, have certain assumptions that ordinal data often do not meet. However, when ordinal scales span a sufficiently

large number of choices (i.e., six or more, as our poll uses), the data can and are often treated as continuous data and likewise tested. Nevertheless, we also replicated all analyses above with non-parametric tests (i.e., Mann-Whitney and Kruskal Wallis) to confirm the results. The non-parametric results were nearly identical. Therefore, because parametric test results are easier to understand (i.e., averages as compared to rank orders), the results in the text above report t-tests and ANOVAs.

## Appendix C

### Detailed Poll Results

#### Statistical Test Results for Poll Finding One: “Interior Designers” Design Interiors

The differences between the Three E questions and other questions were tested via t-tests, which assess whether the group averages are statistically different from each other. If they are not significantly different, one cannot be confident that the difference between group averages in the sample is not due to simple chance or error. For all statistical testing herein, including t-tests,  $p$  levels of statistical significance indicate the degree to which the value of a given result is greater or smaller than would be expected by chance. Typically, a result is considered statistically significant when the probability of obtaining that result by chance is less than 5 percent (.05), and that is the threshold we used.

Table C1 includes t-test findings resulting from the comparison of each Three E question to each distracter and nature-of-work question. The differences between the types of questions were significant in every comparison, as indicated by  $p$  values of .05 or smaller. That is, respondents more strongly and significantly identify a title by the nature of the work associated with it as compared to qualifications ascribed to it.

**Table C1: Differences Between Qualification and Nature of Job Questions**

Question Comparisons	$t$	$p$
Interior Design		
Four-year education to Coordinates rooms	-13.73	.000
Four-year education to Suggests plan and decor	-16.89	.000
Four-year education to Alters appearance	-14.51	.000
Experience to Coordinates rooms	-15.96	.000
Experience to Suggests plan and decor	-18.72	.000
Experience to Alters appearance	-15.88	.000
Examination to Coordinates rooms	-25.44	.000
Examination to Suggests plan and decor	-28.80	.000
Examination to Alters appearance	-26.78	.000
Computer Scientist		
Education to Works with software and hardware	-11.04	.000
Education to Programs technology	-12.35	.000
Education to Works on systems and networks	-11.45	.000
Experience to Works with software and hardware	-17.75	.000
Experience to Programs technology	-18.72	.000
Experience to Works on systems and networks	-18.53	.000
Examination to Works with software and hardware	-14.05	.000
Examination to Programs technology	-15.59	.000
Examination to Works on systems and networks	-15.26	.000

Priest		
Education to Leads services	-10.50	.000
Education to Performs rites	-12.83	.000
Education to Leads a church	-11.49	.000
Experience to Leads services	-16.82	.000
Experience to Performs rites	-20.15	.000
Experience to Leads a church	-18.53	.000
Examination to Leads services	-11.85	.000
Examination to Performs rites	-14.92	.000
Examination to Leads a church	-13.60	.000
Mechanic		
Education to Repairs cars and trucks	-10.35	.000
Education to Routine maintenance	-13.92	.000
Education to Provides inspections	-11.87	.000
Experience to Repairs cars and trucks	-12.71	.000
Experience to Routine maintenance	-16.57	.000
Experience to Provides inspections	-14.19	.000
Examination to Repairs cars and trucks	-14.18	.000
Examination to Routine maintenance	-18.31	.000
Examination to Provides inspections	-15.61	.000
Chef		
Education to Creates food displays	-12.10	.000
Education to Runs a kitchen	-13.65	.000
Education to Plans menus	-11.67	.000
Experience to Creates food displays	-13.45	.000
Experience to Runs a kitchen	-15.57	.000
Experience to Plans menus	-13.18	.000
Examination to Creates food displays	-13.33	.000
Examination to Runs a kitchen	-15.50	.000
Examination to Plans menus	-12.98	.000

### Statistical Test Results for Poll Finding Two: “Interior Designer” Does Not Mean the Three Es

The results above reported Pearson’s correlations, but we also analyzed the data using Spearman’s correlations and Cronbach’s alpha. Pearson’s is typically used for continuous data (such as age, test scores, income and so forth) and Spearman’s for ordinal data (such as those represented by scales used in our poll). However, because of the six-point scale used on the survey (which is a broader scale than traditional four-point scales used on surveys), the results for both tests are quite similar, as indicated in Table C2.

Cronbach’s is a way to measure the relationship of more than two variables (Pearson’s and Spearman’s are limited to two). This facilitates an examination of the relationship of all Three E questions together. It is scaled similarly to correlations, with results between 0 and 1 (signs are

generally ignored), where the closer to one the result, the stronger the relationship between the questions. As Table C2 confirms, none of the correlations or Cronbach's results even approaches moderate (which would be between .40 and .60). Thus, "interior designer" does not mean the Three Es.

**Table C2: Relationships Between Qualification Questions**

Questions	Pearson's	Spearman's	Cronbach's
Interior Design			
Education to Experience	.02	.026	.016
Education to Examination	-.009	.006	
Experience to Examination	.008	.012	
Computer Scientist			
Education to Experience	.042	.045	.068
Education to Examination	-.022	-.005	
Experience to Examination	.062	.049	
Priest			
Education to Experience	.048	.056	.103
Education to Examination	.058	.086	
Experience to Examination	-.001	.022	
Mechanic			
Education to Experience	.056	.054	.065
Education to Examination	-.004	.008	
Experience to Examination	.021	-.003	
Chef			
Education to Experience	-.032	-.034	-.029
Education to Examination	.000	-.006	
Experience to Examination	.005	-.014	

The results above also included comparisons between actual qualifications, as defined by the Three Es, and distracter qualifications (questions 5 and 6). Results in Table C3 include the t-test and *p* values associated with the finding that respondents were just as likely to agree with the distracter questions as compared to education and experience questions, and agreement among the distracter questions was significantly greater than the examination question.

**Table C3: Comparisons Between Interior Design Qualification Questions**

Question Comparisons	<i>t</i>	<i>p</i>
Four-year education to Experience	2.4	.017
Four-year education Examination	14.22	.000
Four-year education to Minimum number of projects	1.81	.070

Four-year education to Portfolio	.362	.717
Experience to Examination	12.12	.000
Experience to Minimum number of projects	-.433	.665
Experience to Portfolio	-1.84	.065
Examination to Minimum number of projects	-11.91	.000
Examination to Portfolio	-13.17	.000

### Statistical Test Results for Poll Finding Three: Interior Design Is No Different Than Unregulated Occupations

We found this using an ANOVA test comparing the qualification questions respectively between the various occupations. ANOVA is conceptually similar to t-tests, except that it allows us to examine differences between more than two groups (t-tests are limited to measuring only two groups). The results showed respondents perceived no differences between the occupations based on education; however, they did perceive significant differences between interior design and other occupations for the experience and examination questions.

**Table C4: Significant Experience and Examination Comparisons Between Occupations**

Comparison	<i>p</i>
Experience	
Interior Design to Mechanic	.003
Interior Design to Chef	.017
Examination	
Interior Design to Computer Scientist	.000
Interior Design to Priest	.000
Interior Design to Mechanic	.000
Interior Design to Chef	.000

## Appendix D

### Details of Methods Used for Analysis of Interior Design Publications

#### Classifying the Articles Based on the Use of Titles

Classifying the articles based on the use of titles involved a research procedure called coding. Coding in analysis of this kind (called content analysis) involves the creation of descriptive categories derived from the content of the article. Coding involves reading an article and assigning a code of some type (usually a number) to describe the article's content. In this case, an article would be coded a "1" if the writer used "interior designer" to describe a designer and a "0" if the writer used another title, such as "interior decorator." Of course, given the human judgment involved in coding, there is always the chance that people might interpret and code articles differently, thereby undermining the conclusions. Thus, we subjected this analysis to an inter-rater reliability test, whereby a second party reads and codes a portion of the total sample, and the results are compared to the first coder's results to measure consistency of coding.

Consistent with standard procedures,<sup>29</sup> the inter-rater sample consisted of 15 percent of the main sample, randomly chosen. Sometimes, inter-rater analysis includes both percent agreement and Cohen's Kappa. Percent agreement involves simply adding up the number of cases coded the same way by the raters and dividing by the total number of cases.<sup>30</sup> Although percent agreement has benefits, mainly conceptual simplicity and ease of interpretation, it has some noteworthy shortcomings. Most prominently, percent agreement values represent total agreement without any consideration given to random chance.<sup>31</sup> That is, coders could have coded an article identically just by chance rather than agreement on the article's content. Thus, percent agreement tends to inflate the degree of perceived observer consensus, making it potentially misleading.<sup>32</sup>

In order to combat this shortfall, reliability may be calculated using Cohen's Kappa.<sup>33</sup> Conceptually, coefficient kappa is the amount of agreement beyond what would be expected by chance. Interpretation of kappa is simple since it takes the form of a correlation result, ranging from -1.00 to +1.00. However, unlike correlation, kappa values less than zero are often considered of no practical interest. Although several authors have suggested similar ranges of interpretation,<sup>34</sup> this study uses the scale below:<sup>35</sup>

- <.00=Poor
- .00-.20=Slight
- .21-.40=Fair
- .41-.60=Moderate
- .61-.80=Substantial
- .81-1.00=Almost Perfect

In our study, Cohen's Kappa indicated .802 ( $p=.000$ ), which signifies substantial agreement between two independent coders who read the articles and coded them very similarly.<sup>36</sup>

### **Data Sources and Coding of Designers Featured in Design Publications**

For the random sample of 254 designers for which we gathered background data, designer education and years of experience were gathered either from the articles, from the designers' respective websites, biographical information included on the ASID website or through direct contact with the designer. We gathered licensure status through either the respective state regulatory boards (see <http://www.asid.org/legislation/state/> for a complete list) or through direct correspondence with the designer.



## Appendix E

# Statistical Testing Results for Analysis of Interior Design Publications

For the analyses of education, licensure status and state regulation we used statistical tests appropriate for categorical data, including Pearson Chi-Square, Goodman and Kruskal tau, Uncertainty Coefficient, Cramer's V and Contingency Coefficient. Basically speaking, these tests are designed to measure the relationship between two categorical variables. Taking state regulation as an example, one might hypothesize that the writers and editors of interior design magazines alter their use of terms to describe design practitioners based on a state's regulation. That is, if articles feature the work of those practicing in titling law states, the writer might adjust, based on the titling law, the use of the terms “decorator” and “designer” given the respective practitioners' levels of education, experience, examination and designation from the state.

If that were so, one would expect to see a strong relationship, as measured by the various statistical tests, between state regulation and terms used to describe the practitioners, thus indicating the writers and editors use the term “interior designer” in deference to the Three Es. Conversely, if results show a weak or no relationship, one would conclude that writers and editors use the term “interior designer” to describe someone based on the nature of her work.

We analyzed experience data using a t-test. Unlike the data for the other questions, we gathered experience in a continuous format. As such, we were able to examine potentially significant differences in the average number of years of experience based on the terms used to describe the designers. In this analysis, one might hypothesize that writers and editors adjust their use of terms based on the number of years of experience for the respective designers. Practitioners with the number of years typically required by titling laws would be called “interior designers,” and those with less would be called something else. Statistically significant t-test results would suggest that such a hypothesis would be true. Conversely, if the t-test results showed no significant difference, then it would appear writers and editors do not take number of years of experience into account when using terms to describe designers in the articles.

In all of this, one variable is noticeably absent—examination status. Regulated states require that designers pass an interior design test (typically NCIDQ), and we attempted to collect these data for each person in the sample. Unfortunately, NCIDQ refused our request for a list of all NCIDQ holders in each state. Moreover, very few designers indicate NCIDQ status in their bios or on their webpages, and only a handful indicated their status in our correspondence with them. This resulted in only 28 data points for this variable, which is too small for meaningful analysis; therefore, we omitted it.

### **The Relationship Between Designer Education and the Use of the Title “Interior Designer”**

Because we measured education as categorical data, we tested the relationship between education and title using Chi Square, Cramer's V, Contingency Coefficient, Goodman and Kruskal tau and Uncertainty Coefficient. Chi Square tests whether the row and column variables in a cross tabulation are related. Statistical significance for Chi Square indicates there may be some relationship between the two variables, but it does not indicate the strength of the relationship.

For the examination of education and title use, we found no significant relationship, meaning writers do not appear to adjust their use of a title based a designer's level of education.

The next two tests, Cramer's V and Contingency Coefficient, both indicate the strength and significance of the relationship between the row and column variables of a cross tabulation. The closer to one the results, the greater the strength of the relationship between the variables. As Table E1 indicates, the results are very close to zero, indicating a very weak relationship between the variables. This confirms the conclusion based on Chi Square that writers pay no attention to a designer's level of education. However, like Chi Square, these are symmetrical measures, meaning they measure only the relationship between two variables and do not in anyway suggest cause and effect.

The next two tests, Goodman and Kruskal tau and Uncertainty Coefficient, act as directional measures, meaning one variable is treated as a cause (i.e., independent) and the other as an effect (i.e., dependent). The values are interpreted as percentages. Beginning with the Goodman and Kruskal tau, this means education only predicts .3 percent of the writers' use of the title "interior designer." Likewise, the Uncertainty Coefficient value indicates the state regulation variable only predicts .6 percent of the use of the title. In other words, knowing a designer's level of education tells us nothing about how writers use the title "interior designer." Therefore, writers and editors of design publications appear to pay no attention to the education level of designers when using titles to describe practitioners.

**Table E1: Relationships between Education and Title**

Test	Value	Significance
Chi Square	.424	.515
Cramer's V*	.013	.883
Contingency Coefficient*	.013	.883
Goodman and Kruskal tau**	.003	.883
Uncertainty Coefficient**	.006	.885

\*Symmetrical measures \*\*Directional measures, Title Use as dependent

### **The Relationship Between Designer Licensure Status and the Use of the Term "Interior Designer"**

Because designer licensure status data are also categorical, we analyzed the relationship between licensure and title consistent with education. As Table E2 indicates, there is no significant relationship between licensure and title use, and the test values are all quite small. Therefore, as with designer education, writers and editors of design publications appear to pay no attention to designers' licensure status when using a title to describe them.

**Table E2: Relationships Between Title and Licensure**

Test	Value	Significance
Chi Square	.527	.468
Cramer's V*	.054	.468
Contingency Coefficient*	.054	.468
Goodman and Kruskal tau**	.003	.469
Uncertainty Coefficient**	.019	.319

\*Symmetrical measures \*\*Directional measures, Title Use as dependent

### The Relationship Between the Use of the Title “Interior Designer” and State Regulation

As results in Table E3 indicate, there appears to be a significant relationship between state regulation and term use. This is evident in the “Significance” column for all tests, where values of less than .05 indicate statistical significance. These significance levels indicate there may be a chance writers adjust their use of title based on state regulations, but the small test values show that is very likely not the case.

The Cramer's V and Contingency Coefficient test values (.164 and .162 respectively) indicate a very weak relationship, since they are close to zero rather than one. The directional tests, Goodman and Kruskal tau and Uncertainty Coefficient, also show very small percentages. This means that knowing the regulation of the state in which a designer works tells us little about how writers use titles. The Goodman and Kruskal tau indicates the state regulation variable only predicts 2.7 percent of the term use variable. Likewise, the Uncertainty Coefficient value shows the state regulation variable only predicts 6.1 percent of the term use variable. Therefore, while the relationship between regulation and title use is statistically significant, it is a very weak relationship. Moreover, we cannot say with any confidence that regulation causes changes in how writers and editors use terms to describe designers.

**Table E3: Relationship Between Title and State Regulation Variables**

Test	Value	Significance
Chi Square	8.34	.015
Cramer's V*	.164	.015
Contingency Coefficient*	.162	.015
Goodman and Kruskal tau**	.027	.016
Uncertainty Coefficient**	.061	.021

\*Symmetrical measures \*\*Directional measures, Term Use as dependent

## Endnotes

<sup>1</sup> Carpenter, D. M. (2007). *Designing cartels: How industry insiders cut out competition*. Arlington, VA: Institute for Justice.

<sup>2</sup> For at least two decades, numerous state agencies have attempted to find evidence of such a threat, and we attempted to do so for our 2007 report—all of which produced nothing. Even interior design leaders have attempted to unearth such evidence. For example, after the Institute for Justice filed suit against Texas's titling act, the head of ASID's Texas affiliate, the Texas Association for Interior Design (TAID), Marilyn Roberts, sent an email to her membership asking them to contact all the interior designers they knew and to send her examples of "cases of harm in Texas" resulting from unlicensed interior design. The goal was to give the information to the Texas Board of Architectural Examiners (TBAE), which regulates interior designers and is defending the law in court. As Roberts noted, "They [the TBAE] are fighting for us and we need to give them ammunition!" In the email, Roberts instructed her members to "Send all information to ME, Marilyn Roberts at [asidtxmr@flash.net](mailto:asidtxmr@flash.net), NOT to the TBAE. If information goes directly to TBAE, it becomes 'public knowledge' rather than 'client/lawyer privileged info.'" Notably, no "cases of harm in Texas" resulting from substandard interior design activities have come to light in the Texas litigation as of this writing.

<sup>3</sup> American Society of Interior Designers. (n.d.) What is an interior designer. Washington, DC.

<sup>4</sup> National Academy of Sciences Committee on Occupational Classification and Analysis. (1981). Interior designer. In *Dictionary of occupational titles*. Washington, DC: U.S. Department of Commerce.

<sup>5</sup> *Byrum, et al. v. Landreth, et al.*, No. 07-344 (W.D. Tex. filed May 9, 2007).

<sup>6</sup> Interior design scholars admit that little research has been conducted on perceptions of the design industry (Whitefield, T. W. A., & Smith, G. (2003). The social standing of the design professions: An intercultural comparison. *Journal of Intercultural Studies*, 24(2), 115-135). One such study, completed by ASID, is discussed in the text above. Two others have some relationship to the research in this report, but less so than the ASID survey. The first is a doctoral dissertation that surveyed 1,500 members of the public concerning perceptions of interior designers, architects and interior decorators (Martin, C. (1999). *The public's opinion of architecture, interior decoration, and interior design*. Unpublished doctoral dissertation, University of Minnesota, Minneapolis, MN). One goal of the survey was to measure people's concept of professionalism. Results indicated the public tends to see a hierarchy among professions, where doctors and lawyers are seen as more professional than design practitioners. They also perceive a hierarchy within the design industry, where architects are seen as more professional than interior designers, who are seen as more professional than interior decorators. Such results comport with research on professions going back decades that indicate public perceptions of hierarchies across and within professions (Abel, R. L. (1979). The rise of professionalism. *British Journal of Law and Society*, 6(1), 82-98; Collins, R. (1990). Changing conceptions in the sociology of the professions. In R. Torstendahl & M. Burrage (Eds.), *The formation of professions* (pp. 11-23). London: Sage; Freidson, E. (1986). *Professional powers*. Chicago: University of Chicago Press; Larson, M. S. (1977). *The rise of professionalism: A sociological analysis*. Berkeley, CA: University of California Press). A second goal of the survey was to measure perceptions of the nature of work practiced by those in the design field. Although results tended to show the respondents perceived different work responsibilities among the practitioners, the high "uncertain" responses (more than 15 percent for some questions) make the results less than definitive. As the author concludes, "These beliefs seem to vary depending on the type of question posed" (Martin, 1999, pp. 139-140). Third, the survey measured public perceptions of licensure for design practitioners.

Results indicated the public more strongly agreed with the licensure of architects (88 percent), as compared to interior designers (51.4 percent). Moreover, the “uncertain” responses for the architecture question was only 8.7 percent, indicating strong agreement, while the “uncertain” response for interior designers was 31.3 percent. Finally, the survey also explored perceptions of qualifications. Results showed most respondents saw a clear difference between the qualifications of architects and interior designers—65 percent disagreed with the statement “architects and designers are qualified to perform the same task.” When asked about the qualifications of interior designers, nearly 60 percent agreed that, “interior designers are qualified by taste and a sense of style to design the interior of buildings.” A second study focused on knowledge of the design occupations and their perceived professional standing (Smith, G., & Whitefield, T. W. A. (2005). The professional status of designers; A national survey of how designers are perceived. *Design Journal*, 8(1), 52-60). Like the prior research, this second study used survey methods to ask members of the public to classify designers as professional, semi-professional or skilled workers. Results indicated the general public listed interior designers as semi-professional (45.5 percent) or as skilled workers (18.5 percent). From this, the authors concluded, “The value of a study such as this is that it enables received wisdom to be benchmarked against actual empirical evidence. The evidence that emerges is fairly clear-cut. While designers may aspire to professional status, this has not been achieved” (Smith and Whitefield, 2005, p. 59).

<sup>7</sup> American Society of Interior Designers. (2005). *Consumer use of design services: An ASID research report*. Washington, DC.

<sup>8</sup> ASID, 2005, p. 4.

<sup>9</sup> This analysis paralleled other such studies employed by interior design researchers and associations seeking to understand how the public views the occupation as reflected in interior design publications. For example, ASID analyzed interior design publications and found,

Many use the words “design,” “decorate,” “designer” and “decorator” synonymously. For example, the title of one article in the May 2003 issue of *Traditional Home* was “Designers at Home: Five of Your Favorites Reveal Their Personal Decorating Styles.” Also, most consumer publications reviewed do not use professional appellations for interior designers or any other professionals (American Society of Interior Designers. (2004). *The interior design profession: Facts and figures*. Washington, DC, p. 45).

Another study tracked the frequency of vocabulary used by journalists and found the term “designer” is used generically to designate either an architect, a designer or a decorator (Drab, T. (2002). *The impact of periodicals on the perception of interior design as a profession*. Paper presented at the Interior Design Educators Council Annual Conference, Santa Fe, AZ). Rather than pointing to the practitioner’s training, writers use the descriptor “designer” to define the work someone does.

<sup>10</sup> Kriesberg, L. (1962). The bases of occupational prestige: The case of dentists. *American Sociological Review*, 27(2), 238-244; Verhoevena, J. C., Aelterman, A., Rots, I., & Buvens, I. (2006). Public perceptions of teachers’ status in Flanders. *Teachers and Teaching: Theory and Practice*, 12(4), 479-500.

<sup>11</sup> Since these occupations are largely unregulated—meaning state governments do not require the Three Es

or place other regulatory hurdles on practitioners—the content of the questions were drawn from the U.S. Department of Labor’s Dictionary of Occupational Titles or occupation specific websites. We also drew on the Dictionary of Occupational Titles for the questions about the nature of the work. The construction of interior designer questions was based on the ASID 2005 survey.

<sup>12</sup> American Society of Interior Designers. (2004). *The interior design profession: Facts and figures*. Washington, DC; American Society of Interior Designers. (2005). *Consumer use of design services: An ASID research report*. Washington, DC.

<sup>13</sup> As listed on Vocus.com.

<sup>14</sup> ASID, 2005. The ASID survey finds that interior design magazines are the top sources of information for consumers about interior design. In answer to the question, “Where did you look for information about design/decorating?” magazines were the most frequently mentioned source, more so than local retail stores, friends, family, television and the Internet.

<sup>15</sup> Holsti, O. R. (1969). *Content analysis for the social sciences and humanities*. Reading, MA: Addison-Wesley; Neuendorf, K. A. (2002). *The content analysis guidebook*. Thousand Oaks, CA: Sage; Stemler, S. (2001). An overview of content analysis [Electronic Version]. *Practical Assessment, Research & Evaluation*, 7. Retrieved July 12, 2005 from <http://PAREonline.net/getvn.asp?v=2007&n=2017>; Weber, R. P. (1985). *Basic content analysis*. Beverly Hills, CA: Sage.

<sup>16</sup> We tested the difference between these two groups using a t-test. It should be noted that at only eight, the “other” group size is rather small. However, we took the effects of the small group size into account in running the t-tests. Results indicated the difference was not statistically significant ( $t=-1.44$ ,  $p=.152$ ) because the  $p$  value (the indicator of significance) was greater than .05.

<sup>17</sup> For this analysis, licensure is used as a shortcut for any type of titling or practice regulation required by a state. Therefore, licensure status of a designer could span anything from certification and registration titling laws to full licensure. The status of interest was whether the designer was officially recognized by the state as per relevant regulations.

<sup>18</sup> One of the assumptions of Chi Square analysis is that none of the cells will have a zero. When that occurs, the analysis must use a Yates Correction to account for the presence of a zero cell, which we did herein.

<sup>19</sup> Unlike the examination of education and licensure status, statistical testing shows a significant relationship between state regulation and term use, but test values reported in Appendix E indicate a very weak relationship. Therefore, while the relationship between regulation and term use is statistically significant, the very weak relationship means one cannot say with any confidence that regulation causes changes in how writers and editors use terms to describe designers.

<sup>20</sup> This percentage was derived by comparing figures from the Texas Board of Architectural Examiners (TBAE) of all interior designers who had been “grandfathered in” (provided to IJ as part of our titling lawsuit in Texas) to the total number of licensed interior designers as reflected on the TBAE’s website. Cathy Hendricks,

executive director of TBAE, testified in a deposition that the actual figure was 78 percent. According TBAE, the discrepancy may be because the numbers fluctuate based on new licenses, renewals/non-renewals and so forth.

<sup>21</sup> Nakao, K., & Treas, J. (1994). Updating occupational prestige and socioeconomic scores: How the new measures measure up. *Sociological Methodology*, 24, 1-72.

<sup>22</sup> Counts, G. (1925). The social grading of occupations: A problem in vocational guidance. *School Review*, 33, 19-27.

<sup>23</sup> Daniel, A. (1983). *Power, privilege and prestige: Occupations in Australia*. Sydney: Longman Cheshire; Mackinnon, N. J., & Langford, T. (1994). The meaning of occupational prestige scores: A social psychological analysis and interpretation. *Sociological Quarterly*, 35, 215-245; Nakao and Treas, 1994; Taft, R. (1953). The social grading of occupations in Australia. *British Journal of Sociology*, 4, 181-188; Watson, C. M., Quatman, T., & Edler, E. (2002). Career aspirations of adolescent girls: Effects of achievement level, grade, and single-sex school environment. *Sex Roles*, 46(9/10), 323-335.

<sup>24</sup> Smith and Whitefield, 2005.

<sup>25</sup> Whitefield and Smith, 2003.

<sup>26</sup> Nakao and Treas, 1994.

<sup>27</sup> Nakao and Treas, 1994; Watson et al., 2002; Whitefield and Smith, 2003.

<sup>28</sup> Nakao and Treas, 1994.

<sup>29</sup> Stemler, 2001.

<sup>30</sup> Watkins, M. W., & Pacheco, M. (2000). Interobserver agreement in behavior research: Importance and calculation. *Journal of Behavioral Education*, 10(4), 205-212.

<sup>31</sup> Stemler, 2001.

<sup>32</sup> Watkins and Pacheco, 2000.

<sup>33</sup> Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, 20, 37-46.

<sup>34</sup> Kvalseth, T. O. (1989). Note on Cohen's kappa. *Psychological Reports*, 65, 223-226; Roberts, F., & Robinson, J. D. (2004). Interobserver agreement on first-stage conversation analytic transcription. *Human Communication Research*, 30(3), 376-411.

<sup>35</sup> Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 33, 159-174.

<sup>36</sup> Landis and Koch, 1977.



## About the Author

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Director of Strategic Research

Dr. Carpenter serves as the director of strategic research for the Institute for Justice. He works with IJ staff and attorneys to define, implement and manage social science research related to the Institute's mission.

As an experienced researcher, Carpenter has presented and published on a variety of topics ranging from educational policy to the dynamics of presidential elections. His work has appeared in academic journals, such as the *Journal of Special Education*, *The Forum*, *Education and Urban Society* and the *Journal of School Choice*, and practitioner publications, such as *Phi Delta Kappan* and the *American School Board Journal*. Moreover, the results of his research are used by state education officials in accountability reporting and have been quoted in newspapers such as the *Chronicle of Higher Education*, *Education Week* and the *Rocky Mountain News*.

Before working with IJ, Carpenter worked as a high school teacher, elementary school principal, public policy analyst and professor at the University of Colorado, Colorado Springs. He holds a Ph.D. from the University of Colorado.

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## About the Institute for Justice

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