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Choosing Between Modern and Heritage Buildings for Professional Services

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Biographical Statements

Lindsay McCunn, PhD, is an Assistant Professor of psychology at the University of Washington Tacoma. Her published research is rooted in a variety of settings measuring different psychosocial and health outcomes. Lindsay has studied how employees respond to sustainable office buildings with respect to job satisfaction, perceived productivity, and engagement. She has also investigated elements of interior design for secondary school libraries, accessible housing units, and hospital acute care units.

Robert Gifford, PhD, is a Professor of psychology at the University of Victoria in British Columbia, Canada. His research interests are at the interface of environmental, social, and personality psychology and combines all three areas in studies of resource management, social judgment and cognition, nonverbal behavior, and the perception of architecture. Dr. Gifford also develops tools to measure personality, environmental, and social constructs to simultaneously advance theory and improve built and natural environments.

Highlights

- Students preferred typical office buildings for all four services
- Residents preferred office buildings for all services except legal
- Those with more experience with offices anticipated more comfort and service quality in offices
- More comfort was expected for legal services over other services in heritage houses
- Offices are commonly preferred for professional practice but heritage houses can be legible

Abstract

The role of building façades in the consumer choice process is not well understood but arguably influences consumers' first impressions of a business and the level of service provided by the professional working within. In two studies, photographs representing exteriors of two building types (purpose-built office and converted heritage house) were shown to participants who chose between them for hypothetical dental, legal, financial, and medical services and assessed them for expected comfort and quality of service. In Study 1, students preferred office buildings for all services. In Study 2, community residents also preferred office buildings for dental, financial, and medical services but not for legal services. In both studies, participants had more experience with office buildings compared to heritage houses for all four services and anticipated more comfort and service quality in offices, especially for dental, financial, and medical services compared legal services. However, more comfort was expected by those in Study 2 when considering legal services over the other three services in heritage houses. Although office buildings are commonly experienced and preferred as settings of professional practice, heritage houses can be legible as places to access comfortable, quality service.

Keywords: building preferences, facades, professional services, offices, heritage houses

Choosing Between Building Types for Professional Services

Introduction

Little research exists on the decisions individuals make among types of buildings to use for professional services. Preferences among façades for the same building purpose (e.g., medical buildings) have been considered (Cherulnik, 1991; Devlin, 2008) and a large body of literature has linked the built environment to people's judgments about inhabitants of a setting (e.g., Arneill & Devlin, 2002; Gosling, Ko, Mannarelli, & Morris, 2002; Pressly & Heesacker, 2001). However, that the façade of a building is part of a consumer's first impression of a business and the level of service provided by the professional working within it is arguable.

With the recent focus on environmental sustainability in the realms of planning and architecture, particularly at the urban level, comes the argument to reclaim existing (and often historic) buildings and exterior facades wherever possible. This practice preserves resources and saves energy and cost expenditures to do with transportation, materials, and construction (Reeder, 2016). When this practice occurs, reused buildings are often utilized for purposes different from those original to the setting. However, if the structure and facade of a building communicates an appropriate message about the service, and the professionals who provide it, then consumers may enter into the space with positive expectations. This line of reasoning stems from the work of Rapaport (1977) and Becker (1977) who assert how buildings can be a medium of nonverbal communication, an expression of culture, and an embodiment of values (Cranz et al., 2014).

Other attempts to identify constructs associated with preferable environments have been made. We know that architecture and non-architecture students differ in their preferences for façades of hand-drawn buildings (Imamoglu, 2000). This is consistent with the body of research showing that formal variables such as enclosure, complexity, and order influence aesthetic response (Berlyne, 1971; Kaplan & Kaplan, 1982; Nasar, 1989a; Wohlwill, 1976). In addition, older buildings generally are preferred over modern ones (Frewald, 1989; Herzog & Gale, 1996), and Herzog and Shier (2000) found a relation between building age and preference, depending on a building's complexity (e.g., modern buildings were preferred over older buildings when building maintenance was not controlled. When maintenance was controlled, older buildings were preferred).

The construct of identity has been linked to preference in metropolitan residential environments (Kaplan, 1972). Identity is, in this sense, a set of building attributes that provide a clear cue to its intended use. Perceived typicality has been found to influence preference positively (Purcell, 1986) and preference has been shown to be associated with the clarity of the intended use of residential scenes in particular: settings with multiple meanings were disliked, whereas scenes in which the general use and specific structural elements (such as an entryway) are clearly defined were preferred (Nasar, 1983). This association is relevant for professionals who operate in buildings that may not appear to be clinical, commercial, or related to healthcare, such as restored heritage homes.

Although this research aids in the understanding of the factors that contribute to the aesthetic appeal of a building, knowledge about why individuals choose to patronize professional services provided by *different* building types is still lacking. Of course,

considerable work has been done to understand how consumers experience particular health care settings, including which features increase comfort and preference in them (cf. McCormick & McCuskey Shepley, 2003). These features include convenience, accessibility, facilitation of wellness, caring of family, and connection to staff and the outside world, consideration of impairments, confidential, private, and safe (Levanthal Stern et al., 2003). However, this study and others like it, focus on the interior of health care settings and not the exterior, or whether one façade type better satisfies users than another.

For example, consider a situation in which two dentists have formed a partnership and wish to establish a new practice. The dentists have a choice between two types of buildings to lease: an office building or a heritage house. Might establishing a workplace in one of these building types enhance or hinder the practice's success? If so, which sort of building is preferred? Which building is expected to be more comfortable, and to be the setting for better service? These questions were investigated for four common professions present in most communities: dental, legal, financial, and medical.

We undertook two studies to investigate whether people prefer to receive professional services in modern purpose-built office buildings or in converted heritage houses. Kaplan's (1972) notions about identity and preference in residential environments may generalize to office settings if heritage houses are found to be less preferred for professional services than office buildings because their original purpose was residential rather than professional. However, given the lack of directly relevant research, no directional hypotheses were advanced about which type of building would be found most preferable, comfortable, and appropriate for the four services.

Study 1

Method

Participants. Seventy-seven undergraduate students enrolled in a psychology course at a mid-sized Canadian university were recruited from a volunteer pool (the Psychology Research Participation System) at a mid-sized Canadian university. Students received extra credit toward their course grade in return for their participation in the study.

Participants' ages ranged from 17 to 24 years ($M = 20.2$, $SD = 1.64$) and were mostly female ($n = 61$, 79.2%). Although not asked about directly, the most frequent level of education was assumed to be "some college, technical/vocational school, or university" given that the sample was taken from a university subject pool.

Materials. Ratings participants offer about photographs of the environment have been shown to reliably predict their reactions to actual environments (Kaplan, 1978; Wood, 1971). Using photographs can also mitigate recall bias (Ghekiere et al., 2015). Thus, six photographs of buildings (3 typical office buildings and 3 typical heritage houses) were set out on a table for participants to view as they completed a rating-type questionnaire (see Appendix A for all six photographs). Three photographs of each building type were used in order to minimize responses about specific features of a particular building, as opposed to the general building type.

Photographs within each category included a similar-sized building in the downtown area of a mid-sized Canadian city. While the heritage houses in the photographs were being used as professional offices at the time the photographs were taken, no indication of this function was clear in the photographs (i.e., any signage was

blacked out using photo-editing). None of the photographs contained people and all depicted a light grey, but not rainy, sky.

Participants completed a paper-and-pencil questionnaire about each professional service (legal, dental, financial, and medical) that asked which category of building type they would choose for each service (e.g., “Which type of building would you choose to go to for your dental needs?”). This question was offered as a categorical response between “Category 1,” “Category 2,” or 3 to denote that they would choose neither category. It was made clear to participants which building type fell into which category because the two groups of three photographs depicting office buildings and heritage houses had signs above them stating “Category 1” and “Category 2,” respectively.

The questionnaire went on to ask about participants’ anticipated comfort using each building type for dental, financial, medical, and legal services, as well as their expectation level concerning of the quality of service provided within each building type, for each service. These items were on a 7-point Likert scale ranging from “very uncomfortable” (0) to “very comfortable” (7). Participants were also asked to indicate whether they had previous experience with each building type. These item required a “yes” or “no” response. Finally, participants were asked to handwrite why they chose one type of building over the other in open-ended format.

Procedure. In a dedicated university lab room under, the supervision of a researcher, the six photographs (three per category, along with the signs denoting which grouping fell into which category) were arranged on a large table in front of another large table where no more than five participants at a time sat to complete the questionnaire. Participants were allowed to look at the photographs as many times, and for as long as

they liked, while completing the questionnaire by hand, independently from other participants in the room. The placement and grouping of the photographs were the same for all participants. The study was not timed.

Results

Service type and choice of building type. First, relations between the four professional services and chosen building type was explored. The office building category was chosen more often than the heritage house category for all four professional services (see Table 1). Chi-square tests revealed that choice percentages differed significantly from a random pattern for each service: $\chi^2(1) = 5.73, p < .05$ for legal services; $\chi^2(2) = 43.20, p < .01$ for dental services; $\chi^2(2) = 43.82, p < .01$ for financial services; and, $\chi^2(2) = 36.03, p < .01$ for medical services. This suggests a meaningful consumer preference for office buildings over heritage houses for all four professional services.

Table 1
Choice Percentages Per Building Type for Four Professional Services (N = 77)

Office Building	<i>n</i>	%	Heritage House	<i>n</i>	%
Legal	49	64		28	36
Dental	50	65		27	35
Financial	51	66		26	34
Medical	44	57		33	43

Anticipated comfort and building type. Descriptive statistics for anticipated comfort level per building type, per service, can be found in Table 2. Participants' anticipated comfort in office buildings for all four services ($GM = 5.63, SE = .10$) was significantly greater than their anticipated comfort in heritage houses ($GM = 4.44, SE = .14, t(76) = 6.84, p < .001$).

While anticipated comfort levels using the four services in heritage houses did not significantly differ (Wilks' $\lambda = 0.99$, $F(3, 74) = .28$, $p > .05$), multivariate t -tests indicated that significantly different levels of comfort were anticipated for the four professional services when they were based in office buildings, Wilks' $\lambda = 0.89$, $F(3, 74) = 3.14$, $p < .05$. Paired-sample t -tests conducted to explore these differences revealed that significantly greater comfort was anticipated when participants considered receiving dental services compared to legal services in office buildings, $t(76) = 2.75$, $p < .01$. Moreover, significantly greater comfort was anticipated when participants thought about receiving financial and medical services in office buildings than legal services in office buildings, $t(76) = 2.76$, $p < .01$ and $t(76) = 2.33$, $p < .05$, respectively. No other significant differences were found with respect to anticipated comfort using the four professional services based in office buildings.

Table 2
Anticipated Comfort Levels Per Building Type for Four Professional Services (N = 77)

Office Building	<i>M</i>	<i>SD</i>	Heritage House	<i>M</i>	<i>SD</i>
Legal	5.30	1.38		4.34	1.60
Dental	5.74	1.32		4.44	1.73
Financial	5.71	1.91		4.40	1.69
Medical	5.74	1.16		4.56	1.90

Expectations of quality of service and building type. Descriptive statistics for expected level of service quality per building type, per service, can be found in Table 3. Overall, expectations of service quality in office buildings were significantly higher for all four professional services ($GM = 5.52$, $SE = .09$) than expected service quality in heritage houses ($GM = 4.53$, $SE = .14$, $t(76) = 6.36$, $p < .001$). Multivariate tests revealed significantly different levels of expected service quality from the four professional

services when they were based in office buildings, Wilks' $\lambda = 0.90$, $F(3, 74) = 2.72$, $p = .05$. Thus, paired-sample t -tests were conducted to explore these differences.

These tests revealed that significantly greater service quality was expected by participants when receiving dental services than legal services, $t(76) = 2.59$, $p < .01$, and that significantly greater service quality was expected for financial and medical services than legal services, $t(76) = 2.10$ and $t(76) = 2.48$, $p < .05$, respectively. No other significant differences in expected service quality in office buildings were found and participants' expected service quality when using the four professional services in heritage houses did not differ, Wilks' $\lambda = 0.96$, $F(3, 74) = 0.97$, $p > .05$.

Table 3
Expected Service Quality Per Building Type for Four Professional Services (N = 77)

Office Building	<i>M</i>	<i>SD</i>	Heritage House	<i>M</i>	<i>SD</i>
Legal	5.25	1.10		4.65	1.37
Dental	5.64	1.12		4.42	1.60
Financial	5.56	1.10		4.43	1.67
Medical	5.64	1.12		4.61	1.77

Previous experience with building type. The extent to which participants had previous experience with each building type was also investigated. More participants had previous experience with office buildings than heritage houses for all four professional services (see Table 4).

Table 4

Percentages of Previous Experience Per Building Type for Four Professional Services (N = 77)

Office Building	<i>n</i>	%	Heritage House	<i>n</i>	%
Legal	19	25		7	9
Dental	68	88		22	29
Financial	25	32		3	4
Medical	68	88		22	29

Note: Percentages do not sum to 100 since one may have some amount of experience with both building types

Correlational analyses examined relations between previous experience and anticipated comfort within both building types for each service. Previous experience with heritage houses for dental services was significantly and negatively correlated with anticipated comfort using heritage houses for dental services, $r = -.34, p < .01$. Having previous experience with heritage houses for medical services also significantly negatively correlated with anticipated comfort level using this service in heritage houses, $r = -.32, p < .01$. No other significant correlations were found (all $ps > .05$).

This pattern of results was mirrored in a correlational analyses done to examine relations between previous experience and expected service quality within both building types for each professional service. A significant negative correlation was found between having previous experience with heritage houses for dental services and expected service quality using heritage houses for dental services, $r = -.37, p < .01$. Having previous experience with heritage houses for medical services was also significantly negatively correlated with expected service quality using medical services in heritage houses, $r = -.25, p < .05$. No other significant correlations were found between reported levels of previous experience with office buildings and expected service quality for any professional service (all $ps > .05$).

Qualitative observations. In response to the open-ended questions at the end of each section of the questionnaire, 52 of the 77 participants commented about why they chose the building types they did with respect to each service. Among the most frequent statements about office buildings was that the buildings looked “professional” ($n = 10$), “safe” ($n = 9$), and “credible” ($n = 3$) than heritage houses, and “are more modern” ($n = 13$), with “commercial/business resources around” ($n = 10$) and “seem to offer more technology” ($n = 11$).

In contrast, heritage houses were frequently said to “make me think of older times” (or a similar statement; $n = 19$), be “gloomy” ($n = 2$) or “too old” ($n = 4$), “relaxing” ($n = 4$), “small” ($n = 8$), “closed off” ($n = 2$), and “stuffy” ($n = 2$), and “offer personal relationships” ($n = 5$). Other comments were not as frequent, descriptive, or informative, such as “it looks good to me” ($n = 4$) and “its ok” ($n = 3$).

Discussion

In this initial study, office buildings were chosen by university students over converted heritage houses for hypothetical use of four professional services: legal, dental, financial, and medical. However, the small amount of previous experience participants had with heritage houses may partially explain why office buildings were preferred.

Significantly more comfort was anticipated in office buildings, for all four professional services, compared to heritage houses. Indeed, more comfort was expected in this building type for medical, dental, and financial services compared to legal services. Little research exists to explain this result, although they are, in part, consistent with one study showing that larger buildings typical of medical centers are preferred, with respect to comfort, over traditional house-type buildings (Devlin, 2008). Qualitative

comments concerning comfort in office buildings frequently included words like “safe” and “modern.” Perhaps these concepts drove the significant difference in anticipated comfort in office buildings over heritage houses and matter more for professional services concerning health services compared to legal services.

Overall, higher levels of service quality were expected in office buildings compared to heritage houses, especially when thinking of receiving dental, financial, and medical services in office buildings than for legal services. Again, this concurs with previous work concerning medical buildings (e.g., Devlin, 2008). In contrast, when considering heritage houses for the four services, expectations of service quality in did not significantly differ. Perhaps because more participants had previous experience with office buildings than heritage houses, they may have been better able to recall salient experiences and form judgments about service quality in them. Interestingly, participants with previous experience using a heritage house for medical or dental services anticipated significantly less comfort and expected quality of service in heritage houses. It may be that the nature and valence of previous experience participants have with both building types, particularly concerning medical and dental services, is worth asking in future research.

Qualitative comments made by some participants in the sample suggest that office buildings are perceived as modern and technologically appropriate for legal, dental, financial, and medical services, and that heritage houses represent somewhat outdated care and treatment. The perception that office buildings are more technologically advanced than heritage houses is interesting given that many technological amenities can be installed in a heritage house. Thus, perhaps the youthfulness of participants in Study 1

influenced perceptions of heritage houses as less technologically accommodating than office buildings. An older and broader sample of community members may perceive professional services in office buildings as cold and unwelcoming compared to those who are younger and may therefore prefer heritage houses for a more personal, comfortable, or meaningful experience. Therefore, preferences of a more diversified demographic group are examined in Study 2.

Study 2

Study 1 was conducted using a sample of undergraduate students and their relative lack of experience with professional services, particularly legal and financial, may have affected their sense of appropriateness and comfort level with both types of buildings. Therefore, to investigate and enhance the generalizability of Study 1's results, a second study using individuals from the wider community was conducted. We expected this sample to include the preferences of individuals who would likely have more experience with the four professional services. However, we did not put forward a directional hypothesis concerning building type preference for the four services given a general lack of literature and an inability to generalize the results of Study 1 without further exploration.

Method

Participants. Eighty adults living in the same medium-sized Canadian city as those who participated in Study 1 volunteered to participate. Compared to Study 1, this sample was more gender-balanced with women making up 58.8% ($n = 47$) of the sample (compared to 79.2% in Study 1). Participants were recruited through word of mouth and

email snowball sampling. Their average age was 44 years ($N = 79$, $SD = 17.00$; one participant did not give his age).

Educational level was assessed by asking whether participants had “some secondary school,” “a secondary school diploma, some college or university,” “a Bachelors degree,” “a post-bachelor degree,” “a Masters degree,” or “a PhD or professional degree.” The educational level with the highest frequency was “some college or university” ($n = 23$; 29% of the sample); the educational level with the lowest frequency was “PhD or professional degree” ($n = 3$; 4% of the sample). Thus, the sample is likely similar to Study 1 with respect to education level.

Materials. The same six photographs of buildings used in Study 1 (3 typical office buildings and 3 typical heritage houses) were emailed to participants in a MS Word document so that they could insert responses, save, and return it to the lead researcher via email (refer to Appendix A). The same questionnaire was also used, but included additional demographic questions about education level.

Procedure. The same six photographs used in Study 1 were emailed to a small sample of participants in an urban community near the city’s university who expressed interest in participating in environmental psychological research. Attached to the email was the same questionnaire used in Study 1 (with additional demographic questions) and instructions on how to complete and return it. Many participants forwarded the email to others and a snowball sample was formed. Just as in Study 1, participants were able to look at the six photographs as many times, and for as long, as they liked while completing the questionnaire. Completed questionnaires returned to the lead researcher via email were printed so that data could be entered into statistical software

anonymously: no identifying information had been typed on any completed questionnaire.

Results

Service type and choice of building type. Similar to Study 1, more participants chose the typical office building category to use dental, financial, and medical services. However, heritage houses were chosen more for legal services (see Table 5). Chi-square analyses revealed that these frequencies differed significantly from a random pattern, $\chi^2(3) = 64.60, p < .01$ for dental services, $\chi^2(3) = 64.30, p < .01$ for legal services, $\chi^2(3) = 53.50, p < .01$ for financial services and $\chi^2(3) = 87.70, p < .01$ for medical services. This suggests a meaningful preference for office buildings for dental, financial, and medical services, and for heritage houses with respect to legal services.

Table 5
Choice Percentages Per Building Type for Four Professional Services (N = 80)

Office Building	<i>n</i>	%	Heritage House	<i>n</i>	%
Legal	37	46		43	54
Dental	49	61		31	39
Financial	47	59		33	41
Medical	56	70		24	30

Anticipated comfort and building type. Descriptive statistics for anticipated comfort level per building type, per service, can be found in Table 6. Similar to Study 1, participants' anticipated comfort in office buildings for all four professional services was significantly greater ($GM = 5.32, SE = .13$) than anticipated comfort in heritage houses ($GM = 4.38, SE = .14$), $t(78) = 5.37, p < .001$. And, as in Study 1, multivariate tests showed that anticipated comfort in office buildings differed by professional service, Wilks' $\lambda = 0.83, F(3, 76) = 5.19, p < .01$. Significantly more comfort was expected when

considering receiving dental services than legal services in office buildings, $t(78) = 2.95$, $p < .01$ and significantly more comfort was expected when considering receiving financial and medical services than legal services in office buildings, $t(78) = 2.16$, $p < .05$ and $t(78) = 3.99$, $p < .001$, respectively. In addition, more comfort was expected when thinking about receiving medical services in office buildings compared to financial services, $t(78) = 2.06$, $p < .05$.

While no other significant differences were found among anticipated comfort ratings for professional services based in office buildings, significantly different levels of comfort were anticipated when considering using professional services in heritage houses, Wilks' $\lambda = 0.84$, $F(3, 76) = 4.99$, $p < .01$. Unlike in Study 1 where no meaningful differences were found with respect to his building category, paired-samples t -tests revealed that participants anticipated feeling significantly more comfortable if they were to receive legal services in a heritage house than dental, financial, and medical services, $t(78) = 3.13$, $t(78) = 2.90$ and $t(78) = 3.72$, $p < .001$, respectively.

Table 6
Anticipated Comfort Levels Per Building Type for Four Professional Services (N = 80)

Office Building	<i>M</i>	<i>SD</i>	Heritage House	<i>M</i>	<i>SD</i>
Legal	4.87	1.76		4.87	1.53
Dental	5.44	1.50		4.23	1.77
Financial	5.28	1.51		4.28	1.71
Medical	5.69	1.37		4.12	1.57

Expectations of quality of service and building type. Descriptive statistics for expected level of service quality per building type, per service, can be found in Table 7. Again, mirroring the results of Study 1, participants' expectations of service quality in office buildings for the four services were significantly greater ($GM = 5.40$, $SE = .12$)

than expected service quality in heritage houses ($GM = 4.76, SE = .13$), $t(77) = 4.54, p < .001$. And, multivariate tests revealed significantly different levels of expected service quality for professional services in office buildings, Wilks' $\lambda = 0.71, F(3, 75) = 10.40, p < .001$. When paired-sample t -tests were conducted to explore these differences, significantly greater expected service quality was reported when thinking about receiving dental services in office buildings compared to legal services, $t(77) = 4.81, p < .001$. Also, significantly greater expected service quality was found for both financial and medical services in office buildings compared to legal services, $t(77) = 3.34, p < .001$, and $t(77) = 5.58, p < .001$, respectively. Finally, significantly greater expected service quality was reported for medical services than financial services in office buildings, $t(77) = 2.29, p < .05$.

No other significant differences were found among levels of expected quality of service in office buildings, and levels of expected service quality for the four professional services did not differ significantly with respect to heritage houses, Wilks' $\lambda = 0.91, F(3, 75) = 2.60, p > .05$.

Table 7

Expected Service Quality Per Building Type for Four Professional Services (N = 80)

Office Building	<i>M</i>	<i>SD</i>	Heritage House	<i>M</i>	<i>SD</i>
Legal	4.89	1.47		5.06	1.27
Dental	5.58	1.18		4.66	1.44
Financial	5.40	1.41		4.69	1.54
Medical	5.74	1.14		4.63	1.63

Previous experience with building type. The extent to which participants had previous experience with each building type was also investigated. More participants had

previous experience with office buildings than heritage houses for all four professional services (see Table 8).

Table 8
Percentages of Previous Experience Per Building Type for Four Professional Services (N = 80)

Office Building	<i>n</i>	%	Heritage House	<i>n</i>	%
Legal	53	66		22	28
Dental	77	96		23	29
Financial	67	84		11	14
Medical	79	99		26	33

Note: Percentages do not sum to 100 since one may have some amount of experience with both building types

Correlations were conducted to examine relations between previous experience and anticipated comfort within both building types, for each service. A significant positive correlation was found between previous experience using dental services in heritage houses and feelings of comfort using dental services in office buildings, $r = .23$, $p < .05$. And, similar to Study 1, previous experience receiving medical services in heritage houses negatively correlated with anticipated comfort using heritage houses for medical services, $r = -.33$, $p < .01$. No other significant correlations were found between anticipated comfort levels and previous experience with office buildings or heritage houses (all $ps > .05$).

Correlational analyses were also done to examine relations between previous experience and expected service quality within both building types for each service. While no significant associations were found for office buildings (all $ps > .05$), previous experience using medical services in heritage houses positively associated with expected service quality for this service in this building type, $r = .25$, $p < .05$.

Demographic correlations. Study 2 afforded the opportunity to conduct correlational analyses between the four professional services in each building type and

demographic attributes such as age, sex, and education level. Not surprisingly, previous experience using legal services in office buildings ($r = .55, p < .01$) and heritage houses ($r = .33, p < .01$) positively correlated with age. Similarly, previous experience using financial services in office buildings ($r = .28, p < .01$) and medical services in heritage houses ($r = .28, p < .01$) positively correlated with age.

Level of comfort using dental services ($r = .35, p < .01$) and medical services ($r = .28, p < .01$) in office buildings positively correlated with age, but not in heritage houses. Similarly, expected level of medical service quality in office buildings also positively correlated with age ($r = .27, p < .05$).

In addition, education level negatively correlated with expectations of service quality in office buildings for financial ($r = -.31, p < .01$) and medical services ($r = -.22, p < .05$). Moreover, educational level negatively correlated with comfort levels in office buildings for medical services ($r = -.22, p < .05$).

Qualitative observations. Forty-nine of the 80 participants commented about why they chose the building types they did with respect to each service. The most frequent comments about office buildings were that ‘proprietors based in offices instill confidence’ ($n = 10$), and that those who work in offices ‘must be modern and familiar with technology’ ($n = 19$). One comment specific to financial services operating in an office building was that “an investment firm in an office building seems better able to maintain a competitive edge and instill trust in its clients,” and three others noted that office buildings are more “hygienic than heritage houses for medical services.”

Frequent comments about heritage houses centered around the words “personalized/personal connection” ($n = 11$), “warm” ($n = 9$), “comforting” ($n = 9$), and a

notion that the professional working inside a heritage house would “listen to you” ($n = 8$). However, they also stated that heritage houses were “outdated” ($n = 4$) and “worn” ($n = 4$). One comment specific to medical services offered in a heritage house was that “a doctor using a heritage house would be more compassionate.” Other comments written in the open-ended section of the questionnaire were not frequent, overly descriptive, or informative, such as “nice” ($n = 3$) or “I like the paint color” ($n = 1$).

Discussion

Taken together, Studies 1 and 2 add to the body of knowledge about consumer preference for traditional, and non-traditional, professional settings and show that preferences for professional services in the legal, dental, financial, and medical sectors may vary with building type.

Study 1 showed that typical office buildings were preferred over converted heritage houses for legal, financial, medical, and dental services by undergraduate university students. In Study 2, office buildings were also favored over heritage houses by a sample of older community members for dental, financial, and medical services. However, heritage houses were chosen more often than typical office buildings for legal services among participants in Study 2. Among the possible reasons for this outcome is a relatively higher level of previous experience and familiarity with heritage houses as places of business, perhaps as a result of greater life experience. Indeed, although participants in Study 2 reported having more experience with office buildings than heritage homes overall, for all four services, the percentage of people in Study 2’s sample with previous experience using heritage houses was higher than in Study 1. Indeed, age positively correlated with having more previous experience in heritage houses and offices

for legal and financial services and, therefore, those setting up legal practice may do well to account for the age demographics of those living and working nearby if they wish to attract business from older individuals.

Interestingly, previous experience using dental services in heritage houses positively associated with anticipated comfort using this service in *office* buildings. This result may have been better explained if the valence of previous experience had been asked in the present study. For medical services, the relationship was somewhat different: more previous experience participants reported using heritage houses for medical services associated with less comfort anticipated in that building type. As well, previous experience using office buildings for medical services positively correlated with expected service quality in offices for medical services. It seems that taking care to understand whether previous experiences using medical and dental services buildings have been positive or negative is prudent to knowing more about consumer choices for building types.

Finally, as expected, those who took part in Study 2 were older, on average, than participants in Study 1 and reported having more previous experience with all four services in both building types. Also as expected, participants in Study 2 had equal or more experience using converted heritage houses for all four professional services than participants in Study 1.

Because age positively correlated with levels of anticipated comfort for dental and medical services in office buildings, as well as with expected service quality in offices for medical services, professionals in the health sector ought to consider operating in office buildings to take advantage of high comfort levels and expectations of service quality

from older patients as the population ages. It seems that level of education also informs consumer perceptions of psychosocial variables in a certain type of building. As education increased, expectations of service quality and levels of anticipated comfort concerning medical services in offices decreased. It seems that office buildings may not be predictably comfortable or indicative of good medical service for those who are more educated.

Those in Study 2 anticipated significantly more comfort for dental, financial, and medical services compared legal services in office buildings. More comfort was also expected when thinking about receiving medical services in office buildings compared to financial services. Moreover, participants expected significantly more comfort when considering legal services over the other three services in heritage houses. This particular finding makes sense given that individuals in Study 2 preferred heritage houses over office buildings for legal services. It may be that the element of previous experience is only one driver of consumer preference for this building type with respect to legal services. Indeed, qualitative comments with respect to heritage houses in Study 2 included words concerning comfort, such as “warm,” “comforting,” and “personalized/personal connection:” these words may describe what consumers want and expect when receiving to legal services in a converted heritage house.

Similarly, significantly better service quality was expected in office buildings compared to heritage houses for all four services, especially dental, financial, and medical. Greater service quality was also expected in office buildings for medical services when compared to financial services. This pattern of results was similar to those found for anticipated comfort levels in office buildings. It seems that the ways in which

consumer form expectations about the kind of service they will receive in a certain type of building differs depending on service itself. These findings seem to indicate that medical and dental practitioners, along with those working in finance, who seek to gain clientele without referrals or conventional advertising should choose to base their businesses in typical, traditional-looking office buildings in order to take advantage of strong expectations of service quality. Why service quality was expected to be lower in a heritage house than an office building in both studies for certain professional services is not clear. Qualitative data from both studies suggests that the heritage houses were perceived by some participants to be “worn,” “outdated,” and “small.” None of these arguably negative words were used by participants to describe office buildings.

General Limitations

The buildings in the photographs differed in size, amount of parking, and foliage growing nearby. However, differences in participants’ preferences were analyzed between building categories, not between individual buildings. Buildings shown in each category were chosen for their apparent typicality and participants were not asked to assess buildings on an individual basis. Therefore, it is unlikely that design differences within each category significantly affected preference. Another limitation may have been the small number of photographs shown in each category (3). However, offering more stimuli to participants may have introduced order effects and made it challenging to distinguish their preferences. Indeed, other research has used as few as two photographs to elicit reliable reports of preference from participants (e.g., Ghekiere et al., 2015).

In general, building exteriors are often designed to permit prospective patrons to make accurate inferences about the conditions they would experience inside the building

itself (Cherulnik, 1991). It appears that the six buildings used in the set of photographs used in both Study 1 and 2 had a strong degree of identity (as per Kaplan, 1972) with clear cues about possible uses and, thus, could be judged as appropriate for the four professional services in the present study (i.e., the buildings' forms adequately communicated function as per Lynch, 1960 and Nasar et al., 2005).

Finally, perceived availability of parking probably did not cause bias toward one building type over another. Such a bias likely would have been evident in participants' responses to the open-ended questions (as would other possible confounding elements in the photographs such as perceptions of accessibility). Including the open-ended question after each section of the questionnaire gave participants an opportunity to explain why they chose one building category over another. If the reason was that there seemed to be more parking available in some of the photographs compared to others, comments in the open-ended section would have revealed it. However, comments to do with parking, distance, or travel time were not made. Likely, this is because each section of the questionnaire began with a statement that each building in a category should be assumed to be the same distance away from the participant's home. This statement was included to remove any conflict concerning the length of time it may take for a participant to travel on foot to either building type.

Future research and conclusion. More research is needed to fully understand the relation between built environments and consumer decision-making. It would seem that both medical and dental services were preferred in office buildings by those taking part in both studies. One way to take advantage of this consumer preference is for medical and dental practitioners to pair their services together in the same office building (when

possible). But whether an individual would choose to use a professional service in a building that does not seem appropriate simply because that service is paired with another service existing in a preferred building type is unclear. Future research on consumer choice and building façades should investigate whether individuals will reliably choose to visit a dentist in the same office building in which his or her physician is located, all else being equal. Perhaps an individual's comfort level with a service in a particular building transfers to other services offered in the same building, hence the movement toward medical and dental clinics situated in malls, as Sloane and Sloane (2003) elucidate.

In addition, to augment the findings of the present work, the question of a building façade's importance to consumer choice, as compared to other factors such as the building's interior design, comfort level with the professional working within a particular building type, and the professional's reputation should also be investigated in the future.

In summary, the present work suggests that university student-aged individuals may prefer to use certain professional services in typical office buildings and that while older community members also prefer office buildings for medical, dental, and financial services that they will choose converted heritage houses for legal services. Those in both studies had more previous experience using office buildings for all professional services, but those in Study 2 had relatively more experience with heritage houses, as expected with an older population. Both samples anticipated more comfort for dental, financial, and medical services compared legal services in office buildings. But, more comfort was expected by those in Study 2 when considering legal services over the other three services in heritage houses. And, participants in both studies expected better service

quality in office buildings for all four services. These and other results associated with previous experience with anticipated comfort and service quality related to medical and dental services highlights the importance of understanding the valence of consumers' previous experience with building types. And, given significant associations found between anticipated comfort and expected service quality for both medical and dental services in office buildings, professionals in the health sector should consider choosing office buildings to take advantage of these elements of older consumer preference.

Taken together, the two studies indicate that accounting for potential consumers' age and psychological impressions of facades, choices made by professionals concerning building form and function can be even more accommodating and appropriate. Although office buildings are more commonly experienced as settings of professional practice, and often preferred as such, heritage houses can also be legible to the public as places to access comfortable, quality professional service.

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Appendix A

Photographs of Typical Office Buildings: Category 1



Photographs of Converted Heritage Houses: Category 2



