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**COLLECTING DATA IN A TIME OF CRISIS:
THE CASE OF MAHWA ASER IN SANA'A, YEMEN**

Wafa Al-Daily, Kathleen Parrott, Max Stephenson Jr.
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Informal settlements are a relatively new phenomenon in Sana'a city, Yemen. Although the history of these communities in the city goes back to the early 1980s, the shortage of formal housing caused a remarkable surge in their growth in recent years. Today, informal settlements are the home of 25% of Sana'a city's entire urban population, according to El-Shorbagi (2007). To face the challenge of the rapid spread of informal settlements, local authorities in developing countries, including Arab states such as Yemen, often practice a forced eviction policy to curb, reverse and prevent illegal occupation of land (Centre on Housing Rights and Evictions 2009; 2006; UN-Habitat 2006; 2007).

The Mahwa Aser neighborhood, the oldest and densest informal settlement in Sana'a, has been the subject of multiple forced eviction attempts and these have typically been met by strong community resistance. The international development literature has long examined one side of the story of forced evictions—government policies and planning practices. Little literature has examined the other side of such narratives—residents' responses and the rationales behind such reactions. The goal of this research was to begin to fill this gap in the literature through an in-depth study of Mahwa Aser in Sana'a. The inquiry sought to understand how residents of informal settlements respond to forced eviction; what forms of place attachment, if any, they evidence and what rationales they offer for community resistance in the face of state efforts to secure their removal or resettlement. The investigation sought further to identify the significant factors that have elicited community protest and resistance as well as the meaning of place for residents of informal settlements. The research documented and analyzed incidents of forced eviction and community resistance in Mahwa Aser from two perspectives that of the affected residents and that of government, international organization and non-governmental organization officials.

Because very little literature exists concerning informal settlements in Yemen generally, or in Sana'a city more particularly, including the rationales for forced eviction and community resistance, the researchers planned to conduct interviews with key informants—residents of Mahwa Aser who witnessed one or more incidents of forced eviction and resistance in the community. The goal was to understand more fully how the community's residents perceived forced eviction and community resistance. To comprehend the broader story, the researchers also planned to interview government officials, planners, representatives of community groups, and directors of international and international nongovernmental organizations (IGOs and INGOs) and nongovernmental organizations (NGOs) in Sana'a and in the United States. The investigators conducted a pilot study in Sana'a from September 2009 to February 2010. Poor residents of Mahwa Aser were hesitant to share their experiences and participate in the study due to the political instability evident in Sana'a city. As a result, only official figures from the government, INGOs, IGOs and NGOs participated in the pilot effort. The investigators conducted a number of interviews with interested officials and directors in Yemen, as well as in the U.S. The researchers also collected relevant reports, government and official documents, articles, academic theses, and various media documents during this period.

The researchers planned to conduct the main phase of their inquiry in Sana'a from February 2011 to August 2011. Unfortunately, the country experienced a long-lived regime crisis beginning in February 2011. Violence and street fighting, infiltration by suspected Al-Qaeda agents, riots by members of a southern secessionist movement, an ongoing low-level war by Houthis in the north, and nearly continuous attempts to overthrow the government severely changed life in Yemen beginning in February 2011. The United States Embassy closed. Mail service between the United States and Yemen was suspended. Utility service was limited and unpredictable. For the researchers, the results were:

- Significant worry, limited and unreliable communication and fear for the safety of family and friends.

- Knowledge that, if they returned to Yemen to conduct research, they would likely be unable to obtain a visa to return to the United States to complete analysis and secure publication.

The crisis situation required that researchers consider other approaches to conducting interviews with Mahwa Aser's residents, Yemeni government officials and directors of INGOs and NGOs in Yemen for the main phase of the research project. Alternative methods selected included:

- Proxy interviewers.
- Skype and other electronic interview methods when electricity was available.
- Interviews with knowledgeable officials in positions outside of Yemen.

The poster outlines the methods used to conduct research in a country during a sustained political crisis. Questions addressed include:

- how the alternative methods worked,
- the means which the researchers and the proxy interviewers used for contacting participants and for introducing the research project to them,
- diverse responses of participants to interview methods, and
- the adopted tools for documenting and recording interviews and their relative efficacy.

The poster also highlights the difficulties, setbacks, disadvantages and advantages of conducting the interviews necessary to complete the research project and outlines the strategies employed to address them.

The people of Mahwa Aser are part of a poor, largely disenfranchised segment of Yemeni society. They live in very poor housing conditions and in an unstable housing situation in which they face a nearly continuous threat of forcible eviction. Yet, they have clung to their homes and community. In the unknown future of Yemen, will their community survive? The research in progress, despite the challenges posed by a revolution, offers an opportunity to gain insight into the housing needs of an informal settlement and to contribute to a better understanding of how to address this difficult global issue.

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INSTRUCTIONAL DESIGN TO FACILITATE UNDERGRADUATE CAREER GOALS: A HOUSING INDEPENDENT STUDY IN FAMILY AND CONSUMER SCIENCES TEACHER EDUCATION

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Family and Consumer Sciences (FCS) teacher education students are often required to take a variety of introductory-level content courses, in addition to methods courses, to prepare them to teach in the secondary-level classroom. These introductory courses often include a housing course. FCS teacher education students often take this course with students who are majoring in other areas. As such, opportunities for FCS teacher education students to apply the knowledge gained in a manner that would assist them in their career development are limited.

To meet an FCS teacher education student's curricular needs for housing, an independent study project was designed in collaboration with the student that met program requirements and gave the student opportunities for public speaking, service learning, and teaching housing content. Higher education courses in the field of FCS have a history of service learning components (Leahy & Gottfried, 2008; Randall, et. al, 2010), but there is limited documentation of service learning in undergraduate introductory housing courses.

In this particular housing independent study, the student was required to present their independent study project as a poster presentation at a state conference, complete 10 hours of volunteer work at a homeless shelter, complete guided interviews with three professionals in the housing field, and teach a lesson on housing appropriate for a secondary-level audience. In addition, the student was required to submit a portfolio documenting experiences as well as including written assignments. As part of the portfolio requirements, the student had to write a reflection on their learning as a result of the independent study. The activities for this independent study were selected in consultation with the student as well as senior faculty in the area of family and consumer sciences teacher education.

This student was able to draw upon the professional speaking and volunteer experiences, as well as professional contacts made as a result of this independent study in their post-graduation role as a secondary FCS teacher.

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MAKING IT “REAL”: APPLYING UNDERGRADUATE INTRODUCTORY HOUSING CONCEPTS TO THE REAL WORLD USING A FINAL WRITING ASSIGNMENT

Axton E. Betz, Dana Tell
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Instructors of undergraduate introductory housing courses are confronted with the challenge of keeping adult learners involved along with the challenge of ‘igniting’ student’s interest in the course material (James & Moorman, 2007). These learners bring a variety of housing-related experiences with them to the classroom, along with a variety of needs and expectations of the course (Galbraith, 2004).

In order to facilitate student involvement and have students demonstrate their understanding of and ability to apply the material covered in the textbook, *Introduction to Housing* (Housing Education and Research Association, 2006), students in a sophomore-level introductory housing course were required to apply course concepts and terms to their current or future personal housing situation as a final paper assignment. More specifically, these 50 students were required to choose two concepts or terms from each of the 12 chapters, describe each of them, and then discuss how each was applicable to their current or future housing situation.

Each of the 50 assignments were evaluated based on the following criteria: (1) Identifying two concepts or terms from each of the 12 chapters, (2) Describing each concept or term accurately, and (3) Applying each of the concepts or terms appropriately. Students were also evaluated on writing mechanics.

Students valued the experience of this assignment. One student shared the following after completing the assignment:

“Applying the terms and concepts to the current or future housing situations involved more thinking. Understanding the information covered in the class so that I could relate it to real life made the assignment more interesting. While working on the paper I realized what my goals were in relations to having a house. I walked through what I wanted in my future house. When writing about the chapters that warned about what to watch while making a purchase, I covered those again while writing the paper. Writing a paper that covered all the chapters in the book was something I had never done before. The assignment reiterated all that I had learned.”

This assignment has the potential to be a comprehensive term project that allows the instructor to assess content knowledge as well as students’ writing skills.

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DEVELOPMENT AND IMPLEMENTATION OF A COURSE ON STUDENT HOUSING

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Introduction

Student housing has a long history, dating back to European universities in the Middle Ages, where college students resided in monastery-like buildings meant to separate them from the outside world (Stephey, 2008). Today, student housing is big business - both on-campus and off-campus - to meet the demands of the Millennial age group¹, as well as their “helicopter” parents². The need for student housing will continue as undergraduate student enrollment of 13.2 million in 2000 is projected to increase to 19.6 million students in 2020 (Aud, Hussar, Kena, Bianco, Frohlich, & Tahan, 2011). Universities, along with the multi-family housing industry, must have an understanding of the issues that impact student housing. However, university courses that focus specifically on student housing are rare. Those that are available are most likely offered in Student Affairs curricula with enrollment often limited to those specific students.

Purpose

This poster presentation addresses the need for a course on student housing in the Residential Property Management (RPM) Program at Ball State University, as well as its development and implementation. Future plans for the course are also described.

Demand for a Course on Student Housing

Student housing has been a topic of interest to several RPM students, at both the graduate and undergraduate levels. Many RPM students work part-time in the local student housing industry or serve as Resident Assistants in the residence halls. Several students have completed independent study projects on student housing issues and a growing number have completed graduate-level research projects on this topic. And while the RPM curriculum requires that students take specialized courses in *Senior Housing* and in *Government-Assisted Housing*, there is no course in student housing.

Course Development

In an effort to provide greater distinction between the undergraduate and graduate course offerings in the RPM Program, a new course was added at the graduate level in 2010. FCSPM 696 *Property Management Seminar* was designed with the flexibility to cover a different specialized topic each semester, such as student housing, military housing, condominium management, homeowners’ associations, and other similar specialized topics.

The first opportunity to offer the graduate-level seminar came in Fall 2011 and the focus was on Student Housing. A framework for the course was drawn from content previously developed by former RPM graduate students that had independently studied student housing issues before such a course was developed (Fields, 2011; Piotrowicz, 2009).

¹ The Millennial Generation, children of the Baby Boomers and also known as “Gen Y,” includes those born in the 1980s and 1990s.

² A “helicopter” parent is a mother or father that “hovers” over their child, helping them navigate life, even into early adulthood.

Course Implementation

Four RPM graduate students enrolled in the first offering of the course. In addition, two Student Affairs graduate students were recruited in an effort to meet minimum course enrollment. Students met weekly on Tuesday evenings for 2.5 hours each week.

Topics covered in the seminar included:

- Understanding college students
- Design, development, amenities, and furnishings
- Operations, management, maintenance, and staffing
- Marketing and leasing
- Resident relations, parent relations
- Safety, security, legal issues, media, community relations
- Fraternity and sorority houses, and other specialized topics
-

No textbook was used; rather, contemporary readings were assigned. The course relied heavily on guest speakers from the student housing industry...RPM alumni currently working in student housing and RPM Advisory Board members whose companies are involved in student housing, as well as on-campus student housing professionals. Students also conducted research and wrote papers on a variety of related topics, as well as participated in hands-on experiences through job shadowing at both on-campus and off-campus student housing sites. The class also took advantage of a unique opportunity to attend city planning meetings during a heated debate regarding a proposed student housing development.

Conclusion

There continues to be a need for a course on *Student Housing* at Ball State University. For now, the seminar course will continue to be used until a sufficient number of students warrant the creation of a separate course on *Student Housing*. The next offering is anticipated to be in Fall 2013.

The richness of the discussion between the RPM students and the Student Affairs students was an unexpected highlight of the semester. Whether as a seminar course or as a separate course on *Student Housing*, students from a variety of academic programs will be recruited in the future: Residential Property Management, Student Affairs, Architecture, Real Estate Development, Urban Planning, Business, and others. Student housing is a multidisciplinary topic and needs to be addressed from a variety of perspectives.

Other universities may be interested in developing a course on student housing. Links to materials used in this course will be provided for conference attendees.

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AFFORDABLE HOUSING ALTERNATIVES: ANALYSIS OF COMMUNITY LAND TRUSTS

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Introduction

Housing affordability continues to be a dramatic problem in the United States. As of June 2010 1.6 million homes nationwide (one of every 78 units) were in foreclosure. One strategy to develop and sustain affordable housing are Community Land Trusts (CLTs). CLTs are defined as “organizations created to hold land for the benefit of the community and individuals within the community” (Institute for Community Economics n.d). The Institute for Community Economics (ICE) developed an operations model which can be used to evaluate the success of CLTs in providing perpetually affordable housing for their community. The ICE model guided my research from literature review through methodology and my conclusions and recommendations depended on how closely each of two case study CLTs followed the model, as well as the unique adaptations each CLT made to the model in order to be successful within the context of their respective communities.

Literature Review

My literature review consisted primarily of close reading of *The Community Land Trust Handbook* by the Institute for Community Economics and the published information available both electronically and in print for each case study CLT. The handbook addresses key issues such as incorporation and tax-exempt status, board of trustees and membership, property acquisition and funding, the renewable ground lease, resale formulas, homeowner services and outreach.

Information acquired about the case study CLTs was published directly by the CLT itself; however, literature published by local news sources or by organizations outside the CLT was also used. I utilized articles published in scholarly journals to develop a better understanding of the history and terminology surrounding CLTs as well as their potential economic and social benefits on a national scale.

Methodology

My literature review quickly revealed that although many CLTs have similar operations there exist a wide variety of guiding values and practices among CLTs. The Institute for Community Economics recognizes, “Because communities vary, community land trusts vary both in the emphasis that they place on specific issues and interests and in the strategies and techniques that they use to realize their goals,” (ICE n.d.). In order to better understand how some of these organizations operate individually I chose to conduct a comparative case study between two CLTs in the Mid-West. I utilized extensive literature review of published information about each of the chosen CLTs as well as a one-time interview with the Executive Director of each organization in the fall of 2012 as the main methods for gathering information about these CLTs. Interviews were scheduled via email and conducted orally, face-to-face. My interview questions were as follows:

1. What is the process for becoming a CLT homeowner? How long does the process take? What criterion qualifies a particular family or individual in addition to income?
2. How does household size, income, length of time spent in the CLT home vary among CLT homeowners?
3. To what extent are homeowners involved with the organization after they move in? Are these interactions mandatory or voluntary for the homeowner?
4. What kinds of services are offered to homeowners to assist them in learning about home ownership and managing finances (i.e. home owner and/or budgeting classes, financial advising, free and accessible literature on these topics, etc.)?
5. How are sites selected for CLT properties? Where does the funding come from for purchase of the sites and construction or renovation of the homes?
6. How is the jurisdiction of this CLT determined? What is the range (in miles or acres) across which land belonging to this CLT exists?
7. In addition to the land lease agreement, what makes CLT households more affordable (i.e. no or low interest mortgages, green building initiatives, community services, etc)?
8. What (if any) are the cost advantages and/or societal benefits of CLTs to the external community?

9. How do CLTs collaborate with other organizations and or non-CLT communities to improve affordability and homeowner interaction?

Findings

Though both of the CLTs I studied serve urban communities they maintain very different goals and practices of operation. The identities of the CLTs remain undisclosed because the focus of this study is concerned with the various ways CLTs operate to achieve perpetually affordable housing, not with specific organizations. Conclusions drawn from this study can apply to all operating CLTs and are not solely a reflection of the participating organizations.

CLT 1: Homeowner Focus

CLT 1 was developed by a collective of neighborhood associations and individuals interested in preserving housing affordability in their community. The CLT incorporated in 2002 and one year later achieved 501(c)(3) status in 2003. To date the organization has assisted over 130 homeowners acquire CLT units. Only three CLT 1 homeowners have experienced foreclosure since 2002; although the director noted that it was “three too many”. CLT homeowners are still five times less likely to experience foreclosure than other homeowners. In addition to providing affordable housing to households at below 80% of the area median income, a major goal of the organization’s work is to provide support to CLT 1 homeowners to ensure successful homeownership.

Initial study of CLT 1 and an interview with the organization’s executive director indicated a profound commitment to the success of homeowners made possible by extensive working relationships with supporting organizations, frequent follow-up with homeowners through numerous publications, (annual reports, newsletters, event calendar refrigerator magnets, etc) social and education events, and surveys.

CLT 2: Sustainable, Universal Design and Preservation Focus

CLT 2 was founded in 1991 under the leadership and vision of one individual who saw a need for affordable housing in his community. The organization is incorporated and has 501(c)(3) tax exempt status. To date the organization holds the land for over 65 units in trust and provides affordable housing opportunities to households earning less than 80% of the area median income. Foreclosure rates for CLT 2 are well below national averages. While affordable housing is the main focus of any CLT, CLT 2 also has among its primary objectives, protecting the environment through sustainable design and preservation, and using universal design standards in the construction of CLT 2 units.

Initial study of CLT 2 and an interview with the organizations executive director indicated a profound commitment to preservation. In all three of CLT 2’s developments and in their scattered single-units sustainable building and universal design are important contributions not only to affordability benefits for current owners but to the long term health and welfare of the community.

Conclusions and Recommendations

The model for community land trusts put forth by the Institute for Community Economics (ICE) outlines the important factors of CLT organization and operation. As the above case studies have shown, the overlying model can be successful in providing perpetually affordable housing when applied through very different means (homeowner-focused or sustainability focused). With these observations in mind the following recommendation is made to all community land trusts:

- To build as many relationships as possible with supporting organizations so as not to take on unnecessary time and monetary costs and to provide the greatest level of support and cost efficiency to homeowners.
- To strive for the involvement of homeowners in the preservation of the CLT through community-maintained garden and recreation lands, support of homeowners’ businesses, organized volunteer projects and community clean up events.
- To engage the larger community outside the CLT through publications and social events to gain the support of individuals, policy-makers, lenders, and developers for CLT programming and raise awareness about CLT opportunities and benefits.
- To maintain above all a flexibility of operation and development which is capable of adaptation given economic, social and political conditions and to continuously seek the best practices for meeting the housing, affordability and welfare needs of the community.

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LIGHTING CONDITION EFFECTS AND PERCEPTIONS OF PRIVACY: LIGHTING LABORATORY AND PICTORIAL STIMULI EXPERIMENT

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Introduction

This research attempts to associate lighting conditions with perceptions of privacy environments and participants' states of psychology privacy factors with the perceptions of physical privacy factors. The researchers utilized a subset of physical and psychological privacy factors' attributes and participants' perception of privacy with the *real-world* as compared to *virtual* photograph stimuli of lighting conditions.

The real world stimuli consisted of lighting fixtures in an existing, real-world University lighting laboratory; lamped with different light sources (incandescent and fluorescent); providing different color temperatures (2700° Kelvin, 3,000° Kelvin, 5,000°/6,500° Kelvin); and different illuminance levels (low, high) installed in separate chambers and visited sequentially by participants. Each lighting chamber measured 64 square feet (8'-0" x 8'-0"). Chambers were closed on three sides, opening to the front for entry/exit. Chambers were separated from each other by retracting wall partitions. The chambers were open on top and illuminated by overhead laboratory lighting that consisted of separately controlled bare bulb fluorescents. Participants entered the chambers and were seated as they viewed in-chamber lighting effects. To facilitate repeatability of this study, light level measurements were taken on important surfaces of the chambers with a hand-held lux/footcandle meter. After the lighting scenes in the chambers were programmed, photographs were taken to create a set of pictorial visual stimuli. Participants were exposed to the pre-set lighting scenes in the chambers and photographs were taken of the pre-set scenes for participants' comparison. The virtual world consisted of a set of pictorial visual stimuli representing these same lighting conditions. Virtual lighting studies expand researchers' capabilities as field research in lighting is often hindered by logistics and lighting laboratories are limited or unavailable at many institutions.

This research is underpinned by Gestalt Theory, which proposes that viewers are unable to differentiate components of an environment and only see "an overview of the environment." Perceptions of privacy by persons address individuals' desired level of separateness from or relationship with others. States of privacy have been defined as persons' actual or presumed levels of privacy in particular physical environments ([Matthews, 2008](#); [Pedersen, 1999](#)).

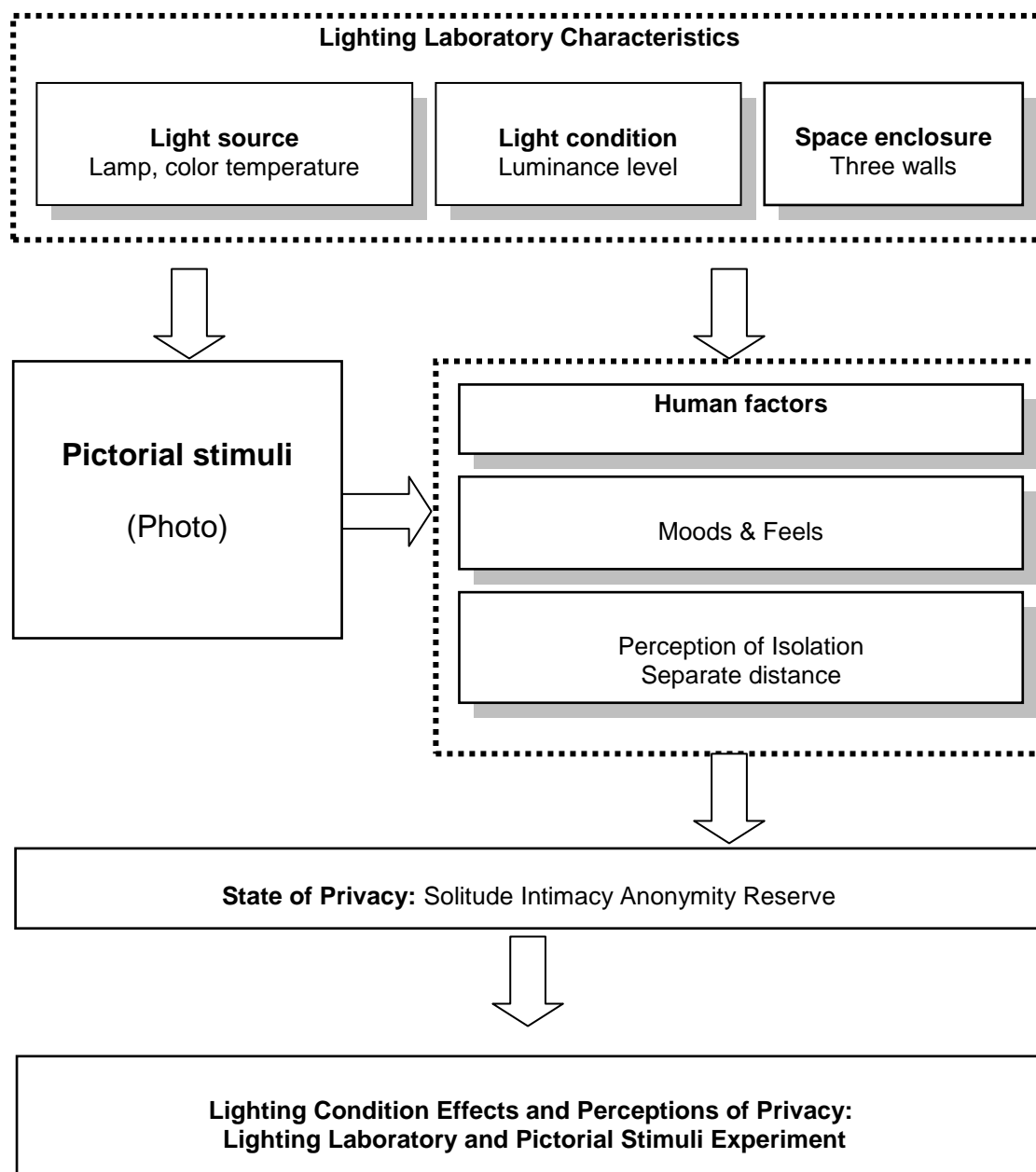
Hypothesis

This research attempts to associate lighting conditions with the perceived privacy environments. It is hypothesized that privacy is influenced by moods (positive and negative), emotions, the perceptions of isolation (separate, distance and enclosure), and states of privacy factors (solitude, intimacy, anonymity, and reserve).

Methodology

Using a convenience sampling technique, students and faculty were recruited from interior design, landscape architecture, and merchandising courses in the researchers' home department. Respondents were also solicited from a group of visiting Thai graduate scholars. A total of 60 individuals participated. In this laboratory research, participants were asked to review and evaluate eight consecutive images of an interior space photographed under various lighting conditions. The photographic images were viewed in a classroom measuring approximately 600 square feet. After darkening the room, the photographic images were projected onto a large screen and participants viewed the slides as a group. Participants were asked to respond to a perception survey about the lighting, the space, feelings of privacy, and other related feelings.

Figure 1. Conceptual framework



After completing this virtual world group exercise, participants proceeded to a real world lighting laboratory. In a laboratory vignette, lighting and seating identical to the previously viewed virtual world photographs was provided. To address reliability, researchers measured and documented light levels for different lighting conditions in the real world laboratory setting at 2'- 6" above finished floor (standard workplane height) using industry-standard methods.

In the laboratory setting, participants experienced various lighting conditions while they continued to complete the perception survey. The researchers utilized privacy subset attribute pairs with redundant meanings to test for the validity of participants' perceptions. The subset attribute pairs for psychological privacy factors included: "freedom from observation" – "solitude", "friendly" – "intimacy", "seen but not identified by the other person" – "anonymity", and "revealing personal aspects of yourself to the other person" – "reserve". The subset pair utilized for physical privacy factors was: "How would you evaluate the distance between you and the other person sitting in the other chair" and "How separate are you from the other person sitting in the other chair?" After

exposure to the *real world* and *virtual* environments, the participants self-administered questionnaires that solicited perceptions. Participants provided ratings on a five-point Likert scale.

Results

This study determined that virtual representations sufficed for interior lighting studies and for inquiries into nuanced topics, such as perceptions of privacy. This is important, as many universities do not have formal lighting laboratories in which to perform research. Research with virtual tools is becoming more common. In addition to the scenes containing floor lamps, selected bulbs in the existing overhead lighting in the lighting laboratory's chambers were energized. Cool-dim indicates a low level high-kelvin temperature light source (cool-white fluorescent). Warm-dim indicates a low footcandle level-low kelvin temperature light source (incandescent). Results showed that the greatest effects on perceived privacy were in evidence under the floor lamp warm-dim condition for real world and the floor lamp-cool-dim condition for virtual world pictorial settings.

Table 1 provides results from real world and virtual world. Results from the floor lamp warm-dim condition **real world** scenario indicate that at least half of participants reported having "much" or "very much" perceptions toward both physical and one psychological attribute of privacy (distance, separation, and freedom). Regarding the remaining psychological attributes of privacy (seen but not identified, friendly, revealing personal aspects of yourself to the other person, intimacy), 50 percent or fewer of participants reported having less than "much" perception.

Results from floor lamp-cool-dim condition for virtual world **pictorial** settings were similar to those of the real world scenario. Again, at least half of participants reported having "much" or "very much" perceptions toward both physical and one psychological attribute of privacy (distance, separation, and freedom). More than half also reported the psychological attribute 'seen but not identified' as "much" or "very much." Regarding the remaining psychological attributes of privacy (friendly, revealing personal aspects of yourself to the other person, intimacy), results were similar to the real world scenario. Here, 50 percent or fewer of participants reported having less than "much" perception. Percentages for **pictorial** settings were lower relative to **real world** settings.

Table 1. Real world and virtual world results

| Floor lamp warm-dim condition for real world | | n | % participants reporting "much" or "very much" |
|---|---|----|---|
| Physical attributes of privacy | • Distance | 33 | 53 |
| | • Separation | 35 | 56 |
| Psychological attributes of privacy | • Freedom | 34 | 55 |
| | • Seen but not identified | 31 | 50 |
| | • Friendly | 15 | 23 |
| | • Intimacy | 14 | 23 |
| | • Revealing personal aspects of yourself to the other person | 11 | 17 |
| | | | |
| Floor lamp-cool-dim condition for virtual world pictorial settings | | | |
| Physical attributes of privacy | • Distance | 37 | 60 |
| | • Separation | 40 | 65 |
| Psychological attributes of privacy | • Freedom | 39 | 64 |
| | • Seen but not identified | 33 | 53 |
| | • Friendly | 10 | 15 |
| | • Intimacy | 5 | 7 |
| | • Revealing personal aspects of yourself to the other person | 10 | 16 |
| | | | |

Discussion

The researchers had postulated that the participants would experience fewer distractions in the real world laboratory settings than in the virtual world pictorial settings. The real world settings may have actually been more distracting due to necessary interaction between the researchers and students. This may have caused the participants in the real world settings to be more conscious of privacy issues resulting in their responses of lower instances of perceived privacy. The "side by side" settings for the participants' seating in both the real world and virtual settings may not have been representative of some of the privacy attributes such as "intimacy".

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LIGHTING THE WAY FOR CONSUMERS: DEVELOPING A LIBRARY OF LIGHTING FACT SHEETS

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“Education is not the filling of a pail, but the lighting of a fire.” Attributed to [William Butler Yeats](#)

Introduction

In today's information age, consumers constantly seek and are bombarded with a plethora of product information, especially about lighting. Consumers receive so much input that it may difficult to discern between good quality, impartial information, and rubbish. Also difficult is the determination as to whether lighting product advertisements should be trusted. It may also become intimidating or even impossible for consumers to interpret the highly technical data, which is regularly produced by lighting system components' vendors or other industry sources.

Fortunately, savvy consumers are aware of the existence of accessible, research-based, expert-reviewed fact sheets on a variety of topics. The U.S. Department of Agriculture has been charged with providing consumer information since inception in 1862 (Newton, 1863). One vehicle for information delivery is fact sheets, which are often on display in county Extension offices. These publications provide key information in written and visual formats. As consumers may otherwise experience challenges in absorbing and applying available information, fact sheets have historically been designed to be visually pleasing and easy to read. Rodewald (2001) found that even in today's high tech environment, consumers of wildlife related topics identified fact sheets as the preferred means of information delivery.

However, relatively few fact sheets were found to have addressed the many areas and complex issues associated with modern lighting systems. The lighting fact sheets developed in this study have further been designed to be portable so that they may be put into use where they are needed, for example, as consumers are standing at the store selecting light bulbs. In-store, the buyers may make informed decisions based on the information provided, lowering the risk of expensive lighting mistakes.

Purpose

As part of a lighting fact sheet library, the purpose of this pilot study was to develop and disseminate a series of fact sheets regarding lighting issues to increase public awareness and adoption of lighting in a format that delivered key points on relevant sub-topics.

Methodology

After reviewing previously developed fact sheets within the college and also from other universities, researchers attended their college-sponsored workshop on fact sheet development. Because the researchers' intended area of interest was broad, it was determined that a fact sheet "library" would be developed. This library was anticipated to potentially include about ten fact sheets, developed over a period of a few years.

A tri-fold, two-sided prototype was developed which was believed could facilitate the fact sheets' use "on the go" by consumers. A departmental graduate student with graphic design experience was hired to develop a custom design, including an original "signature" logo, color scheme, and text "template" on which all fact sheets in the library would be based. The fact sheets were subsequently reviewed by experts, edited as necessary, published online by the University's Agricultural Communications Services, and made to be directly printed from the publicly accessible Agricultural Communications Services fact sheet database.

Results

To date, seven lighting fact sheets have been developed by the researchers (see Table 1).

Table 1. Fact sheet information

| | Title | Provides information on... | Status |
|---|-------------------------------|--------------------------------------|---------------|
| 1 | Safe and sustainable lighting | Popular light bulbs | Done |
| 2 | Sustainable dimming | Household light dimming | Done |
| 3 | Light pollution | Light pollution awareness | Done |
| 4 | Sustainable security lighting | Light to help increase security | Done |
| 5 | Light and color | Relationship between light and color | In production |
| 6 | Light and aging eyes | Impacts of lighting on aging eyes | In production |
| 7 | Light and fading | Role of lighting and fading | Done |

Five of the current seven fact sheets have been published thus far. A “hit” tracking system was used to measure impact in the simplest terms, that is, how many users viewed the fact sheets. Thus far, according to Agricultural Communications, the three published fact sheets received 68, 59, and 62 hits respectively. User-qualified data, revealed through correspondence solicited by the researchers, indicates that the fact sheets are well received by county educators. Additionally, Cooperative Extension curriculum was recently designed to work in conjunction with the fact sheets, thus, more impact is expected. Two of the published fact sheets were displayed in a departmental exhibit and one was displayed at the National Sustainable Design Exposition on the National Mall in Washington D.C. in 2011, thus further raising exposure. Anticipated to broaden our impact, three fact sheets were accepted for publication in an architecture reader for academics in Thailand.

Discussion and Conclusions

Although the lighting fact sheets library project has been successful, there have been some challenges. Currently, to access the fact sheets online, a consumer must scroll through hundreds of fact sheet titles or type in the name of the fact sheet in order to locate the appropriate document. Currently, one cannot search under the researchers’ department or college name for the lighting fact sheets, although this feature was available for other departments and colleges at the University.

The researchers have also realized that the frequency of the recorded hits will not be accurate. Educators have received links to the fact sheets embedded in e-mails or as attachments, but these were not counted as “hits” by the tracking program. The researchers also do not know how many copies have been printed at any given time, which means that one download might not equate to only one end user. For example, an educator could download a fact sheet once and make ten copies to take to a single meeting.

The escalation in fact sheet production in the researchers’ home department appeared to have prompted the crafting of a departmental policy for internal and external fact sheet review. The dissemination of lighting information via fact sheets has contributed towards fulfillment of the land grant mission of the University – to educate the citizens in their state and beyond.

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EXAMINING GOVERNMENT ASSISTANCE FOR RURAL³ ELDERLY⁴ HOUSING WITH 2009 AMERICAN HOUSING SURVEY DATA

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Introduction

The U.S. Government Accountability Office (GAO) identified 23 distinct federal housing programs that “target or have special features for the elderly” (Schwartz, 2010, p.240). These programs include housing construction programs targeted exclusively to the elderly, subsidy programs offering special features for the elderly, and several mortgage insurance programs with components for the elderly.

In terms of elderly householders living in rural (non-metropolitan) areas, approximately 393,000 (6%) rural households age 62 and over receive some type of government housing assistance. Among them, 250,000 (63%) of rural elderly renters live in federally sponsored housing or pay reduced rent under a federal program and almost 45,000 homeowners (11%) have used a government loan or grant for alterations or repairs to their homes. Rural areas differ widely in terms of population trends and the socio-economic mix of their older population (Rogers, 2002). Over 21 million households are headed by a householder age 65 and older and 27% of them (5.8 million) live in rural areas. The rural elderly population shows higher poverty rates, and rural areas tend to have a higher percentage of the elderly in their total population than their urban counterparts (George, Pinder, & Ross, 2003).

Purpose of the Study

The purpose of this study was to examine governmental assistance for the elderly households in rural areas by using a national sample of the American Housing Survey (AHS). Specific objectives of this study were to describe 1) the overall demographic and housing profile of the rural elderly; and 2) the profiles of households who received any types of government housing assistance and their housing characteristics.

Methodology

This study used the most recent 2009 AHS national sample. The AHS is a biannual survey sponsored by the U.S. Department of Housing and Urban Development (HUD) and conducted by the U.S. Census Bureau. Among the total sample of 73,222 housing units, 2,945 housing units (4.02% of the total sample) that was filtered with variables of *age* (65 and over) and *location* (living in rural areas) were used for this study. The Statistical Package for the Social Sciences (SPSS) version 18 and Statistical Analysis System (SAS) version 9.3 were used for descriptive analysis.

Findings

Profile of 65 Years and Over Living in Rural Areas

The average age of the respondents was 74.5 years old (maximum of 93 years old). The average family income was \$41,245. Almost 91 % were home owners, 7% were renters, and 2.3% were living without paying rent. Male respondents were 57%. More than half (54.1%) were married living with or without their spouses. Almost one third (34.8%) of the respondents graduated from high school and

³) In this abstract, HUD's definition of “rural” areas was used, which is from the Census definition which is *open country or places with a population of less than 2,500*.

⁴) Throughout this abstract, the “elderly”, “senior”, or “older adults” is defined a person who age 65 or older. However, most federal housing programs adopt 62 or older for their definition of the “elderly”.

39.9% attended college. Non-Hispanic Whites were dominant (93.1%), 4.8% were Black/African American, and 3.2% were Hispanic/Latino.

The majority of respondents (80.2%) lived in a one-unit detached building, 3.2% lived in a one-unit attached building, 5.9% lived in an apartment with two or more units, and 10.6 % lived in a manufactured home. The average number of bedrooms was 2.87 with a maximum of 7. The average number of persons in a household was 1.77 (90.4% lived in a household with one or two persons). The average number of full bathrooms was 1.63 (91% had 1 or 2 full bathrooms). The average size of the unit was 2,048.38 square feet.

Average monthly housing costs were \$699 and average monthly rent was \$632. The majority of respondents (96.5%) reported their housing was *adequate*, whereas only 2.4% reported it *moderately inadequate* and 1.2% reported it severely *inadequate*.

Government Housing Assistance Programs for the Rural Elderly

Sixty three (2.3%) reported that the government subsidized the rent for their houses. Twenty one (0.7%) received vouchers to help with rent. Only 27 (0.9%) responded that their building was owned by a public housing authority. For homeowners, 22 (0.7%) received governmental assistance for their first mortgage and 28 (1%) received a loan or grant for their housing alteration. Table 1 shows the overview of selective variables of respondents who received any type of government assistance on their housing.

Table 1. Overview of selected variables of respondents who received government housing assistance

| Mean | Government Housing Programs | | | | |
|-------------------------------------|--------------------------------|----------------------------------|--|--|---|
| | Renters | | | Home owners | |
| | Public housing (n=27, 0.9%) | Subsidy for rent (n=68, 2.3%) | Voucher for helping pay rent (n=21, 0.7%) | Subsidy for 1 st Mortgage (n=22, 0.7%) | Loan/ grant for alterations (n=28, 0.9%) |
| Age of householder | 77.85 | 78.09 | 77.71 | 71.27 | 74.79 |
| Number of persons in household | 1.07 | 1.09 | 1.09 | 2.05 | 1.86 |
| Square footage | 610.91 | 630.07 | 627.00 | 1,742.59 | 1,612.50 |
| Number of bedrooms | 1.11 | 1.32 | 1.32 | 2.82 | 2.71 |
| Family income | \$15,808 | \$14,824 | \$12,431 | \$37,130 | \$40,852 |
| Monthly housing costs ¹⁾ | \$281 | \$375 | \$361 | \$1057 | \$979 |
| Monthly rent | \$309 | \$609 | \$609 | N/A | N/A |
| Amount of rent actually paid | \$239 | \$317 | \$190 | N/A | N/A |

Variable description from the AHS codebook:

- 1) Monthly housing costs: These data are combined into one variable by summing, when applicable, utility costs, real estate taxes, cost of homeowner insurance, condominium/homeowner's association fee, land/site rent, other mortgage charges, other required mortgage fees, mortgage payments, routine maintenance costs, and rent payments.

Conclusion and Discussion

This study investigated selective housing and demographic characteristics of seniors living in rural areas who received any type of government housing assistance, including a rental subsidy, a mortgage, or public housing programs. It also identified overall socio-economic and housing characteristics of the elderly population in rural areas to provide background information in understanding those who received government assistance. Except for the subsidy for rent (2.3 %), less than one percent of the total AHS respondents received each type of government assistance (public housing programs, voucher for helping rent, subsidy for 1st mortgage, and loan/grants for alteration).

Since this study used the AHS national data, the results show fairly exact overall picture of housing for the elderly living in rural areas who received government assistance but have limits to reveal detailed information, such as specific program types. Based on the results from this study, future research needs to investigate how each program works, in terms of scope of the programs, criteria for recipients of each program, etc. It also needs to identify if those who do not receive assistance have affordable housing without such assistance or if there are too many barriers for them to access to the various governmental assistance programs. These future studies will help to identify how to utilize current federal or local government housing assistance programs for households who need government assistance.

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**OLD WINE IN NEW BOTTLES? REVISITING BUILDING AND LOAN ASSOCIATIONS
IN POST-QRM TIMES**

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This abstract introduces the strengths, weaknesses, opportunities and treats of past building and loan societies and discusses how building and loan societies for post-QRM times could look like. Over the past five years or so, the United States has faced a foreclosure crisis that has had enormous consequences on households, neighborhoods, cities, states, and the nation. One of the policy responses was the Dodd-Frank Wall Street Reform and Consumer Protection Act (“Dodd-Frank Act”). This Act documents an effort to limit those lending practices that took place leading up to the collapse of the mortgage market and has several key provisions that foresee the establishment of Qualified Mortgages (QMs) and Qualified Residential Mortgages (QRMs) with the goal for lenders to originate safe and sustainable residential mortgages.

The proposed QM loan standards define loans and underwriting criteria, i.e., preventing the origination of loans with features associated with high default rates (e.g., a lack of income documentation; pre-payment penalties, negatively amortizing or balloon payment, or interest-only mortgages). These QM standards apply to all residential mortgages. The proposed QRM loan standards require that mortgage lenders retain capital in the amount of 5 percent of loans they sell into the second market, oftentimes referred to as “skin in the game.” An exception to this risk retention requirement is allowed for loans deemed to be particularly safe based on time-tested guidelines related to documentation of financial information “used to qualify the borrower, debt-to-income-ratios, product features, points and fees, and whether a loan has mortgage insurance or any other credit enhancement” (Carr et al., 2011, p. 24). Interestingly, neither down payment nor the size of downpayment were included in the Dodd-Frank legislation. Nevertheless, many recent QRM loan standard discussions have focused on a downpayment size of 20 percent. While most agree with having safe and sustainable mortgages, many disagree with the proposed downpayment size, pointing out a minimal improvement in the proportion of non-performing loans yet an increased proportion of borrowers excluded from the homeownership market (American Land Title Association et al., 2011; Genworth Financial, 2011).

The Center for Responsible Lending (2011) simulated several effects of down payment requirements, based on a sales price of \$172,100, the average house price in the United States. Table 1 below provides information on the simulated effects of several down payment requirements.

Table 1. Simulated Effects of Down Payment Requirements

| | 20 Percent Down Payment | 10 Percent Down Payment | 5 Percent Down Payment |
|---|-------------------------|-------------------------|------------------------|
| Sales Price | \$172,100 | \$172,100 | \$172,100 |
| Cash Required at Closing (Down Payment and 5 Percent Closing Costs) | \$43,020 | \$25,815 | \$17,210 |
| Monthly Savings Amount | \$250 | \$250 | \$250 |
| Approximate Number of Years Required to Build Down Payment | 14 | 9 | 6 |

Source: Center for Responsible Lending (2011)

They conclude that it will take 14 years to save for downpayment with a 20 percent down payment, nine years for a ten percent downpayment, and six years for a five percent downpayment. Regardless of the

outcome of the discussion by lenders on the proportion of the downpayment, many potential homebuyers might find themselves without sufficient cash at hand for the downpayment. Thus, public policy should encourage wealth building to meet potential downpayment requirement by lenders (whatever it may be) and to aspire sustainable homeownership in the mid and long run.

In the United States, wealth building oftentimes occurs through taking on debt, for example to become a homeowner, to attend college, or to establish a business. Tax-code supported wealth building oftentimes occurs through homeownership (through the deduction of the mortgage interest and the property tax) and through investment (through preferential tax rates on capital gains and dividends and through tax-deferred retirement savings). Most of these public resources, however, disproportionately benefit high-income earners (Cramer et al., 2012). Saving for downpayment for homeownership, regardless of income status, is currently not encouraged by public policy through the tax code (with the exception of retirement accounts which might serve as savings accounts for homeownership). The only exception is Individual development accounts (IDAs) that are oftentimes used to save for homeownership, to attend college, and to establish a business, but they are subject to very low income ceilings.

Given potential future downpayment requirements by lenders, it is worth discussing saving for downpayment for homeownership. While savings models for homeownership were in place up to the 1920s, they have not been revisited recently. This paper fills this gap in regards to building and loan societies that were in place from the 1880s to the 1920s the United States (Snowden, 1997 and 2003). The contractual foundation of building and loan societies was the share accumulation plan where each non-borrowing member pledged to buy shares in the association by paying regular weekly or monthly dues until his or her investment reached a predetermined maturity value. Then, a non-borrowing member became a borrowing member who took out a mortgage. Non-borrowers and borrowers fully shared the risks and rewards of the association's mortgage portfolio. Obviously, they were interested in high dividends of their shares and low interest rates on their mortgages. Given this setup, members were interested in members paying their dues on time, and the association making safe and sustainable loans, charging interest and premia on time, and keeping administrative expenses to a minimum. Most building and loan societies were local so non-borrowing and borrowing members were able to somewhat monitor each other although organizational schemes differed slightly (Snowden, 1997).

In the context of the current QRM discussion, the conference presentation will discuss the strengths, weaknesses, opportunities and treats of past building and loan societies and explore what building and loan societies for post-QRM times could look like.

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LINKING BOOMERS' EXPECTATIONS OF AGING TO HOME AND COMMUNITY

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Introduction

Boomers are often generalized as well-off, educated, traditionally married, suburban homeowners. However, the large cohort is financially, ethnically, and racially diverse. With recent declines in home equity and retirement savings, many may lack the financial resources to self-finance home modification, in-home supportive care and services, or moves to senior housing. Based on literature suggesting that the youngest Boomers are not concerned with issues of aging as well as a pilot focus group with married, middle-income, working Boomers who were especially reluctant to discuss aging and changes, we interviewed diverse, low- and moderate-income, leading-edge and middle Boomers (between 55 and 65 years old). This abstract summarizes focus group interviews with 42 Boomers representing recent immigrants, minorities, unmarried, and low-income metropolitan residents. The purpose is to describe the participants' housing and community concerns, expectations, and plans for aging. The findings are intended to influence the planning of housing and services to support the physical, emotional, and social needs of residents as they age within their neighborhoods and communities.

Methods

We held seven focus groups with 3 to 13 individuals who received a \$25 gift card. Participants signed the Institutional Review Board consent form and completed a short demographic questionnaire. Two researchers were present at each session, one moderated; the other took written field notes as a reference to the transcripts and summarized the discussion. The summary served as a member-check. The one hour focus groups were audio-taped with a digital recorder and transcribed.

Within each focus group, participants were recruited so that they were similar in race, gender, and perceived income (income was not asked on the questionnaire). Housing arrangements varied, 20 (48%) were renting, 18 (43%) owned, 2 lived rent free, 1 had a lease to own arrangement, and 1 did not provide information on housing tenure. The mean age was 57 years; age ranged from 44 to 69 years; and, 29 (69%) were female. Fifty-two percent of the participants were of color.

The data analyzed were the participants' own words in response to semi-structured interview questions. The analytic strategy utilized a systematic approach. Transcripts were independently read several times by each of three researchers. Transcribed statements were organized in a matrix by question; we reviewed responses to questions simultaneously across focus groups. The matrix also was reviewed to identify themes that emerged across questions. Significant statements were highlighted and theoretical categories identified (Bloomberg & Volpe, 2008). Using theoretical category statements we developed a table to help identify formulated meanings. Formulated meanings were categorized into themes, themes and statements were compared across focus groups and related to concepts identified in the literature. The approach was organized and flexible, the matrix and tables helped identify "big ideas" without overlooking themes related to demographic subgroups (Patton, 1997).

Findings and Discussion

Although uncertain about the future, participants easily articulated housing concerns: lack of financial resources, inability to predict health problems, and a lack of unbiased information. They considered the issues and plan, as one participant indicated, "*It's best to prepare for the future today.*" When questioned about the future, several individuals of color concluded their lives would not extend 10 and 20 years. Participants in stable relationships or stable housing assumed their lives and housing would remain the same. Single individuals and individuals of color were more likely to express uncertainty. Singles were more likely to have considered senior housing. The majority expected to age in their current home or neighborhood, although moves to warmer climates or to small, out-state communities were mentioned. Those who considered changing housing mentioned townhouses, condos, or apartments with reduced maintenance costs and responsibilities. Downsizing concerns included losing access to gardens and space for hobbies, needing to sort and discard possessions, and lack of space for family gatherings.

Accessibility was a major theme; accessibility to affordable public transportation, stores, cultural amenities, and medical services was important. Participants also described physical accessibility related to their housing and mentioned single-level living with wider doorways and hallways. They also wanted to be sure that friends with wheelchairs could visit.

You want to make that accessible so they can get around in your house. You know, you're a certain age, more than likely you're going to have some friends of a certain age so you want to make it accessible. You still want to have a good time."

Another participant was frustrated that wheelchairs accommodations often dominate accessibility discussions; she has a brother who is deaf and has not been able to find an affordable phone. Other participants were concerned about declining eyesight and maneuvering within their environment.

Participants had a variety of neighborhood safety concerns including waiting for buses after dark, safety round other housing complex residents, and security in their individual units. Participants wanted quiet where they did not hear neighbors and did not worry about bothering neighbors.

If you don't have peace you cannot leave the house or the apartment. If your neighbor is crazy you cannot live there. . . .Peace is the life. You have to have security.

The term "senior housing" was negatively characterized as dense, small, isolating, expensive, and concentrated older, frail individuals. Alternatively, several participants described age-segregated communities positively with specialized services, activities, and a supportive culture.

Conclusion

In many aspects participant comments mirror the Baby Boomer literature. They want to age in place and prefer a single-family unit with access to green space; neighborhood settings are important determinants of appropriate housing. With the exception of grab bars there is little awareness of modifications that support mobility and safety. Most agree with the negative connotations of senior housing, although some thought less responsibility for maintenance and easier one-level living might be beneficial.

Many are not planning for future needs although we saw a tendency among metropolitan residents who are recent immigrants, minorities, unmarried, and participants who have been involved with aging parents to think about their future needs and consider housing alternative. Furthermore, participants want to be involved or their voices represented as plans are made for their futures.

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THE INTRODUCTION AND DEVELOPMENT OF THE HOMEFLOW MEASUREMENT INSTRUMENT

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This study explores differences between similar dwellings' "homeflow"—a term this study introduces to describe a home's overall performance—and which can be attributed to items such as utility costs, service life, curb appeal, organization, safety, health, and how occupants operate the home (i.e., property, house, and its occupants). Homeflow is thus derived by examining items found in the literature and then determining how much individuals believe those items can impact the overall performance of their home living situation.

Research Objectives

This study quantifies variation within the home living situation so that families can measure how far their homeflow score is from a standardized baseline score. This score is calculated by substituting numbers into this study's regression-analysis data. Families in the US can use this score as a gauge to determine how they are performing relative to other families. If a family answers the same questions that comprise the significant factors in this study, then it could reasonably gauge its level of homeflow relative to other U.S. families with similar household compositions.

Methods and Results

A representative sample of US households was surveyed (U.S. Census, 2010) according to three criteria: respondents' ages were between 25 and 50, they were paying a mortgage for their residence (or own it), and at least one minor was living in the home. These criteria resulted in a desired minimum sample size of 384. The sampling strategy was to randomly invite 1,006 of the eligible U.S. households to respond, and 423 usable surveys were returned for an effective response rate of 42.0 percent.

Measures development.—A web-based, 10-point scale questionnaire was used whose dependent variable measured the degree to which homeowners felt they could increase their homeflow. Homeflow was operationalized as three constructs, which were each measured using 27 independent items (i.e., questions). The first set of 27 questions related to a *minor home-modifications* construct (e.g., programmable thermostat, reducing thermostat setting on hot-water heater, having CFL or LED lighting throughout home); the second set of 27 questions related to a *home-maintenance* construct (e.g., having deck boards that are flipped over, screw fastened, and sealed; having deck guard rails spaced according to building codes; having trees free of any dead branches or limbs hanging above the roof); and the third set of 27 questions related to a *family operations and routines* construct (e.g., deriving one item per meal from the home's property, everyone taking a 15-minute walk together or stretching after dinner, accomplishing tasks around the home on a routine schedule).

Measures of reliability.—Each of the three constructs were subjected to Exploratory factor analysis, and two factors resulted for each of the three constructs. To assess the degree to which these six resulting factors were accurately measuring homeflow, Cronbach-alpha values were calculated (Lattin et al., 2003) for each factor. All values were greater than .90, thus indicating that they were highly acceptable as predictors for detecting variation in homeflow (Nunnally, 1967).

Multiple Regression Analysis

To test the hypotheses of influences on increasing homeflow, all six factors were used in a stepwise multiple-regression analysis to determine an optimal model. The *minor home-modifications* construct, which resulted in two independent factors, deals with homeowners' knowledge and opinion of energy-efficient upgrades and practices that can be implemented immediately and at minimal cost. Homeowners felt they could increase homeflow by focusing primarily on 20 of these 27 items in a holistic fashion (i.e., Factor 1a, which was labeled "LoMech-a"), mostly related to resource-usage behavior

modifications. Further, they felt that focusing on the other 7 of the first 27 items as a whole, which are mostly related to making low-cost investments in small energy upgrades (i.e., Factor 1b, which was labeled "LoMech-b"), could also increase homeflow. The *home-maintenance* construct deals with homeowners' knowledge and opinion of keeping their home at a level whereupon it could be sold with relatively little-to-no investment. The first nine items of the *family operations and routines* construct (i.e., Factor 3a, which was labeled "FamOps-a") deals with homeowners' knowledge and opinion of operating their home in a smooth and efficient fashion. Homeowners felt they could increase homeflow by focusing holistically on 13 of the final 19 *family operations and routines* items (i.e., Factor 3b, which was labeled "FamOps-b"), which deal with family routines.

CONCLUSION

When viewed individually, the one factor with the single most influence in explaining the variation in homeflow is the family operations and routines_b factor--more than twice as much variation explained as either of the two significant factors resulting from the *minor home-modifications* construct (i.e., LoMech_a and LoMech_b). Moreover, the items within this factor that address family routines actually are more impacting to homeflow than are the items representing homeowners' knowledge and opinion of operating their home in a smooth and efficient fashion. Thus, if we could better understand why households differ on the impact that *family routines* have on homeflow, perhaps we would be closer to figuring out how to increase homeflow. That is, since family routines accounted for such a large portion of the variation found in homeflow, this appears to be a prime starting point for how to increase families' overall home performance. Families may agree that their routines are sometimes unbalanced and that they would like to make improvements, but often they are not able to make the level of improvements that they desire.

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INDIRECT EFFECT OF HOUSING AND SCHOOL CHOICE POLICY

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Introduction

For decades, the idea of choice has been broadly defined in various public reform programs in order to enhance and improve opportunities for all members of the community. Since the Civil Rights Act of 1968, where efforts sought to achieve racial balance and equality, the idea of choice has been transformed into numerous housing and school programs, particularly in neighborhoods of concentrated poverty (Smith, 1995). Responding to inner city problems, choice interventions changed dramatically to housing and school programs in the late 1980s. The federal government began to focus on the deconcentration of distressed public housing in inner cities and relocate the residents to suburban (e.g. HOPE VI). School interventions have also expanded choices by crossing school district boundaries. This study raises questions about relationships between housing and school choice and how housing and school choice policies would affect low income families in inner city neighborhoods. It is worthwhile to know who benefited from housing and school choice policies, why some families chose to participate on the choice polices, and what happened to the neighborhoods and people that were left behind.

This paper is to explore the effects of housing and school choices. This paper begins with an overview of the policy considerations and history of housing and school choice programs. This paper then discusses the indirect effects of choice and concludes the compound relationships between housing and school choice policies.

Overview of Housing and School Choice Programs

Housing and school choice interventions emerged few decades ago as a legal and policy response to the recognition racial/ethnic and economic segregation and limited opportunity of low-income families. Regarding limited opportunities, researchers have stressed the effects of locational factors on vulnerable families and children living in inner city neighborhoods (Briggs, Ferryman, Popkin, & Rendon, 2008; Wilson, 1987). Many researchers and policy-makers argued that policy changes disrupt segregation patterns for people residing within these neighborhoods. Therefore, both interventions are similar with their implementation. By offering better access to economic and educational opportunities, the interventions are to help low income families out of concentrated poverty and thus to prevent further segregation in such neighborhoods. The difference between school choice and housing choice is that families are able to send their children to better schools without having to change their housing and neighborhoods. Therefore, they can stay in lower-cost neighborhoods with more affordable housing (Crowley, 2003).

Indirect Effect of Choices - Cream Skimming Effect

The unsolved, but utmost issue regarding the choice programs is who will likely choose and who will likely be left behind, referring to the cream skimming effect. The cream skimming effect has been widely discussed in school choice programs. The term was originally coined by Levin (1998). The cream skimming effect states that children from better-off families are more likely to take advantages of school choice programs. Lankford (2001) discovered that those who moved to private schools were of slightly higher socioeconomic status. Movers were 50 % more likely to be white, had over 50 % higher income families, and were over 80 % more likely to have attained higher education families .

The cream skimming effect is observed in participants of housing mobility programs (Goetz, 2004). In a voluntary participation system, participants likely have better resources than non-participants (Goetz, 2004). The system likely sorts out higher motivated and better-off families from concentrated poverty neighborhoods. Besides, since less advantaged families might not be able to settle successfully due to barriers of new neighborhoods, more advantaged families are selected (Goetz, 2004). In a study of the

Moving To Opportunity in Chicago, Cunningham and Popkin (2002) reported that non-movers were more likely to experience barriers such as housing affordability, transportation accessibility, and insufficient information than movers. In involuntary system, researchers found that the original residents of the HOPE VI were mostly faced with multiple problems, financial restraints, but also difficulty in attaining adequate information to search for housing, especially with limited networks and large families (Popkin, Levy, Harris, Comey, & Cunningham, 2004). With these constraints, the original residents might not be able to move by their desired choices. Studying the reasons people choose to move, Smith (2002) used the focused group interviews of the HOPE VI movers. Even though the initial moving decisions were more about local services such as schools, shopping stores, and transportation, their final decisions were generally determined by housing availability. Like the barriers, movers can be more advantaged families that enable them to move away and settle well.

Discussion and Conclusion

School segregation has increased recently (Orfield & Wallace, 2007). What relationships are between housing and schools? What has not yet been highlighted between housing and schools? How could recent school choices impact housing policy? Recent enhanced school choice programs may further impact housing segregation. The patterns of school segregation matched with housing segregation (e.g. Low Income Housing Tax Credit) (Orfield and Wallace, 2007). Middle income families truly exercise their preferred choices towards quality schools: middle income families pull out of inner cities and low income families stay in such cities. Kraus (2008) found that almost two-thirds of participants withdrew from school choices after six years of the implementation. Among the participants, 65 percent were African Americans. Goldring, Cohen-Vogel, Smrekar, and Taylor, (2006) found that African American children were more likely to be reassigned to schools closer to homes in high-poverty neighborhoods when busing arrangements were eliminated. First of all, improving educational attainment alone cannot be solved simply by school policy. Katz (2000) noted that school policy is not considered to be threatened by the contexts of neighborhoods and school districts. Housing and school choice programs are of great advantage to low income families with children in poor neighborhoods. However, school choice programs might be another transformation of taking choices from venerable families. In order to truly achieve a choice, persistent and integrated efforts should be made and accompanied with housing and school policies.

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A PROPOSED LOGIC MODEL AND EVALUATION OF A COUNSELING SESSION FOR HOME EQUITY CONVERSION MORTGAGES OFFERED AT A HOUSING COUNSELING CENTER

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Home Equity Conversion Mortgages (HECM) allow seniors who are 62 years old or older to take equity out of their home by receiving payments through different forms. (HUD, 2011). Due to the high risk nature of HECMs, participants are required by law to attend an appointed, two-hour counseling session before receiving a HECM. Researchers have investigated aspects of HECMs including demographics of seniors who receive a HECM (Stokes, 2010) and some insight into the decision making process of receiving a HECM (Leviton, 2002). However, a formative evaluation of the actual counseling program has never been conducted.

The proposed logic model and evaluation aim to assess the effectiveness of the HECM Counseling Program by longitudinally investigating the satisfaction and decision making of participants. It will begin by identifying the **stakeholders** invested in the HECM program, the established **goals** of the counseling session, the **activities**, and finally the intended **outcomes**. A logic model of the counseling session and its expected outcomes is provided (Appendix 1) to give a condensed rationale of the counseling process.

Stakeholders

The main stakeholders involved in the evaluation of this program are: The FHA office which wants to ensure that programs that are governmentally funded are actually effective. The clients, who want to ensure that they get value out of their time and money; and the counseling organizations that depend on government funding and must demonstrate that what they do is effective.

Goals of Counseling Session

One of the goals of the one-on-one counseling session is to make applicants aware of alternative options. For instance, some alternatives may include, but are not limited to; selling the home and moving to a smaller residence (or subsidized housing), deferred payment and home repair loans acquisition, property tax deferral and relief, social service alternatives, Social Security Income and Medicaid, Medicare, and other housing options (assisted living, etc.).

Another goal of the one-on-one counseling session is to inform participants about the features of HECM's. These features include: property eligibility, rising debt/failing equity, title retention of the home, repayment requirements, and payment plan options. The final goal is to let the client know of loan costs (origination fees, closing costs, insurance premiums, and interest rates); as well as, the implied risks of participation.

Activities

The HECM one-on-one counseling is offered through a 2-hour seminar. During this seminar, clients are provided an approximation of how much they will receive (through the different payment options), and how much would likely be allotted to them each year. This is then compared to the client's current and perspective living expenses.

Outcomes

The first and most important intended outcome of the program is for seniors to make the most financially correct decision. While this may or may not result in an actual reverse mortgage, it is important that this decision do not make their financial situation worse.

The second intended outcome is for clients to identify and implement alternatives to a reverse mortgage. These alternatives will often be dependent on matching personal situations with program characteristics (HUD, 2008; Leviton, 2002).

While both of these goals are established by the counseling program, the difficulty (for purposes of evaluation) is that they are not directly measurable. Because of that, our evaluation will rephrase these goals (see logic model, Appendix 4) to a more measurable form.

Finally, the third intended outcome is for the clients to involve their family and financial heirs to a greater extent. Fulfilling this outcome will result in a more thoughtful decision that will benefit all involved.

Evaluation Design

The evaluation design involves collecting data at four points in time: 1) At the beginning (in-take survey); 2) At the end-of-the-counseling session (session complete survey). 3. and at 3 and 6 months (a completion survey).

The following questions will be addressed during the course of the proposed evaluation:

1. What demographic variables predict reported positive experiences by the participants?
2. How often do participants choose an alternative choice? What demographics predict this choice?
3. How effective are counselors reported to be?
4. How well does reported effectiveness of the session (obtained from the Completion Survey) correlate to the participants rate of their current financial situation and prospective financial future?

Methodology

An intake survey has been developed and distributed at the beginning of every counseling session. This survey would include questions about income, other financial assets, familial assets, knowledge of other financial options, etc. (All survey forms will be discussed at the conference presentation)

Secondly, a counseling session completion form would be administered to participants as an immediate follow up to insure that the participant understands what they have learned. This will not be a quiz of material presented but an opportunity for the participant to express how they feel about the process and how they now feel about reverse mortgages.

Finally, a completion survey will be administered. Currently, participants are asked to initial their names next to a list of items that were covered, stating that they understand what was taught. However, several problems exist with this method. First, participants may not feel comfortable admitting they did not understand a concept that was taught (social-desirability). Second, if the participant did not feel that the counselor was effective, they would not feel comfortable voicing that directly to the counselor.

Phone-calls Follow-Up

Three months after the initial counseling session a phone call will allow the counselors to have better insight into the decision making process of the participants. By collecting their final choice, this decision can be correlated to the other measures taken. Also, if another option is chosen, counselors can find value in the alternatives that are shared during the counseling session. A one-year later- phone call would repeat the questions of the first call but will also ask questions about the overall financial outcomes of the participant. The questions regarding overall financial outcomes are especially important because positive outcomes validate the counseling session.

Appendix 1: Logic Model of Counseling Session

| Existing Conditions | Goals | Activities | Outcomes |
|--|---|---|---|
| Participating in HECMs is a risky financial decision that can greatly affect a senior's quality of life. | Inform seniors of the risks and benefits of HECMs and how it relates to their specific situation. | During two hour counseling session, review senior's financial situation and how the HECM will affect them. Specifically, how much money they can expect to receive and how long it will last? | Seniors will report satisfaction with their decision. |
| Seniors are not aware of alternatives to HECMs. | Inform seniors of viable alternatives so that they have the best financial outcome possible. | During counseling session, demonstrate alternative options and how those alternatives will affect the senior. | Seniors will report having effectively considered alternatives. |
| Home owner's heirs are often not aware of the senior's decision to receive a HECM and how it will affect them. | Seniors will include heirs in decision making process and inform them of their decision. | Encourage seniors to include heirs in decision if not actually in attendance. | The decision to receive an HECM will be shared with heirs and they will work together to ensure the best alternative. |

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**CHANGING THE AMERICAN DREAM?
POST-RECESSION DRIVERS OF PREFERENCES FOR HOMEOWNERSHIP**

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The recent recession and foreclosure crisis has raised some important questions about the future of homeownership, and in particular whether a fundamental shift in tenure preferences has occurred as a consequence of the housing bust. Economic and housing market conditions are known determinants of individuals' decisions about owning and renting housing (Hendershott, 1980; Henderson & Ioannides, 1983), though the personal characteristics of households also play an important role (Clark & Dieleman, 1996). Given the severity of the recent housing crash, with such substantial and widespread losses of housing equity and millions of foreclosures (Joint Center for Housing Studies, 2012), are Americans in fact finding homeownership less appealing? Or do personal and lifestyle considerations outweigh market fluctuations in shaping individual preferences? Understanding how these preferences are influenced by market conditions has important implications for both housing policy and the housing industry, affecting the mix of new housing built, the type of financing sought, and the nature of demand for investments in the existing housing stock.

Our analysis examines whether individuals' experiences with house price declines, underwater loans, mortgage defaults, and other symptoms of housing market distress appear to have dampened their enthusiasm for owning a home. While two other studies have also analyzed the relationship between recent housing market conditions and views on homeownership (Collins & Choi, 2010; Bracha & Jamison, 2011), both used data sets with limited geographic and/or temporal coverage. In contrast, we used data from Fannie Mae's National Housing Survey (NHS), which is a monthly cross-sectional survey of a nationally-representative sample on "attitudes toward owning and renting a home, mortgage rates, homeownership distress, the economy, household finances, and overall consumer confidence" (Fannie Mae, 2011). This analysis used data collected from 19,030 respondents surveyed between June 2010 and October 2011.

Two sets of questions from the NHS were used to construct binominal dependent variables that measure different aspects of individual tenure preferences. The first set asks respondents about their intentions for owning and renting in the short and long-term, with possible responses 'Always rent', 'Always own', 'Rent at next move but buy in the future' and 'Own at next move but rent in the future'; those that expected to always rent were coded with a value of zero, while those planning to ever own were coded with a value of 1. The second question focuses on the financial benefits of owning and renting, and asks respondents which statement is closer to their view: 'Renting makes more sense because it protects you against house price declines and is actually a better deal than owning', 'Owning makes more sense because you're protected against rent increases and owning is a good investment over the long term'; those who viewed owning as financially superior were similarly coded with a value of 1, while those who believed renting was the better option were coded with a value of zero.

Additional questions from the NHS were used to construct explanatory variables reflecting respondents' personal experiences with and local exposure to distressed housing markets. At a personal level, we used data on whether respondents knew anyone in their neighborhood who had defaulted on their mortgage, knew any strategic defaulters (i.e. someone who could pay their mortgage but walked away from their home because they thought it was a bad investment), and among owners with a mortgage, were underwater on their own home (i.e. owned more on their mortgage than the value of their home). At a market level, we used respondents' zip codes to link them to two external measures of local housing conditions: Fannie Mae's post-2001 peak-to-trough percent decline in house prices, and CoreLogic's 2010 total loan delinquency rates.

For each dependent variable, we developed a binomial logit model to test whether respondents' exposure to housing market distress appeared related to their expressed preferences for owning or renting. Both models controlled for an identical set of individual characteristics of respondents, including their age, race/ethnicity, annual household income, educational attainment, family and marital status, employment status, and gender. In addition to running both models on the full sample, we also tested separate models on three subsamples: renters, owners with mortgages, and owners without mortgages. We ran an initial set of eight models (four samples on two dependent variables) that included only the personal explanatory variables described above, and two additional sets of models including each of the two market-level explanatory variables, for a total of 24 models.

The findings from our models suggested some important conclusions about the drivers of individual views on owning and renting in a time of housing market distress. First, we note that in all models, personal and household level characteristics exhibited strong and statistically significant associations with stated preferences for owning, with current housing tenure in particular explaining much of the variation in these preferences across the full sample. Within the subsamples by tenure and mortgage status, several variables related to the age, income, and race/ethnicity of respondents were also important indicators of preferences for owning and renting. Second, in contrast with these personal characteristics, measures of personal exposure to housing market distress showed only two statistically significant associations with tenure preferences; underwater owners had 21% lower odds of expecting to own in the future, while non-mortgaged owners who knew a strategic defaulter had 31% lower odds of seeing owning as the better financial choice. Finally, our linked geographic indicators of housing market distress also had only a small statistically significant association with loan delinquency rates among non-mortgaged owners (a 1% increase in the delinquency rate corresponding to 2.2% lower likelihood of viewing owning as the better financial choice), and no statistically significant associations between views on homeownership and local house price changes. Thus we conclude that while owners who have been directly impacted by the recent collapse of the housing market have a lower likelihood of buying their next home, living in an area hard hit by the housing market downturn was not a sufficient condition to alter individual preferences for owning and renting housing.

Disclaimer: The authors are solely responsible for the content and findings of this analysis, which do not necessarily reflect the opinions of Fannie Mae.

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INVESTIGATING LIFE IN A SENIOR CONGREGATE COMMUNITY: A METHODOLOGICAL NOTE

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Introduction. For the prospective resident of a senior housing complex or community, it is difficult to know what it's like to live in such a community after living most of one's life in a single family home. In any community, the way of life is complex. Ethnographers (e.g., Milinki, 1999; Savishinsky, 2001; Smith, 2006) have developed methods for delving into the life of diverse communities and societies, methods that may provide guidelines for the outsider to learn about a community before actually joining it.

Although the prospective resident of an age segregated community is not likely to possess the skill sets of a trained ethnographer, nevertheless, much information is provided by the marketing staff of these communities in web sites, informational packets, interviews with a sales person, and tours of the community. The author of this methodological note¹ has begun to explore ways of applying ethnographic approaches in an effort to better understand what life in a senior community might be like (e.g., Bertsch, 2005; Diamond, 1995; Gubrium, 1997). This paper will discuss some early results of these efforts and draw implications for other prospective residents on how they might be able to better learn about the life and culture of an age segregated community.

Experiences as a potential resident¹. More than a dozen senior communities have been studied in this research and the author was able to actively participate in one of these communities. The author's first visit was a tour of the facility with friends who were interested in moving to such a community. An appointment was made with a sales person who provided a tour of the complex and answered our questions.

The complex studied is a six story senior continuing care retirement community (CCRC²). It has two wings that join at the center where elevators provide access to each of the floors. It provides skilled nursing on the second floor and assisted living on the third floor. The remaining floors are residential, with a variety of one and two bedroom apartments, in some cases with an additional den, small deck, or patio.

The information from this brief tour, together with the information packet, provided a succinct and fairly comprehensive description of the physical facility, of its' population, its' services and amenities, as well as social activities. At the end of the tour, the sales person answered many of our questions and addressed a number of concerns regarding financing, contractual procedures, etc. However, the tour and packet of materials did not provide much information on the life and culture of its residents. What follows are some accounts of visits and involvement in the life of this complex because of the authors' association with life long friends who had chosen to live in this retirement community.

A second visit occurred when our friends moved into this community after the wife experienced a major medical crisis. Subsequently, activities with them and their new acquaintances included visiting with them in their apartment and joining them for community events such as a Super Bowl party, and Fourth of July, Memorial and Labor Day barbeques. All activities had food as an important feature. These friends had joined a small group of residents who often included the author and his wife in "celebrations" such as birthdays, anniversaries, remembrances of past friends, etc. The Chef organized these events, often in an intimate little dining room immediately adjacent to the larger dining room that must be reserved ahead of time. The Chef also plans and organizes many of the community wide activities, the "waffle breakfast" being one of the most popular events that he schedules every Wednesday. More often than not, food is a focus of these events and of the residents' life in the community.

Daily and weekly activities of the residents are not limited to food activities. Most members of this group of friends are active in church life and shuttle transportation is provided for the residents. It is located in an area with a robust public transportation system. Cultural opportunities such as the

symphony and an arts complex are available to residents through the planning services of the social services director. Gambling nights at local Casinos are another favorite activity for some residents.

Observations and Recommendations. So, how does the prospective resident obtain information about the culture and life of a congregate elderly housing community in order to make a good decision about whether or not to trade their home for such a life? Most CCRCs offer opportunities for the prospective resident to learn more about the life and culture of the community. These include overnight stays in one of their guest suites, complimentary dinners where the staff will provide host residents, use of services such as banking, health, etc. It is possible for a prospective resident to make a gradual transition from his or her own home to increasing involvement in the community. In short, one can learn more about the life and culture of the community by attending marketing sessions and taking advantage of any opportunities offered to participate in the life of the community (social, amenities, etc.). Through this process, it is possible to make friends with residents, and through shared activities with them, gain further insights into the life of the community³.

For the most part, the above suggestions apply to proactive seniors (Pope & Lange, 2010). Many senior congregate communities do now offer opportunities for prospective residents to become involved in the activities of the complex. Finally, there are opportunities for further research and for professional associations such as the Housing Education and Research Association to develop educational programs to help an aging population better prepare for late life housing challenges.

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Footnotes

1. The biographical format is subject to certain potential biases, given an author's history, demographic, and socio-cultural characteristics (LeCompte, 1987). The author of this paper is an older white male, a university professor with a Ph.D. As a participant observer, he has disclosed his role both as a potential client and as a researcher.
2. This is one type of continuing care retirement community (CCRC) in that it provides skilled nursing and assisted living, but it does not offer a life care contract or require an entry fee.

3. Ethnographers look for rich and deep descriptions that provide insights into the life of a community. One example was when we were invited to share a 90th birthday celebration for one of the friends in the group. The evening began with drinks at the apartment of one member, and then on to a meal prepared by the Chef in the private dining room just off the main dining room. The birthday celebrant, although of advanced age and using oxygen, distributed a special bottle of wine for each attending couple, regaled us with stories of her life, jokes, and laughter which resulted in a great evening. Her role in this group reflects a self assured, positive self identity (Stryker, 2000). For seniors who are thinking about trading their home for life in a congregate age segregated community where aging in place results in "a lot of old people" as one of our friends once said, this evening seemed to break down the caricature of dawdling old people on oxygen with walkers. Life does go on and life in such a community can be fun, active, and self-fulfilling.

ALTERNATIVE HOUSING: THE PRISON AND ASYLUM IN WEST VIRGINIA

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The purpose of this paper is to explore the question of the appropriate reuse of existing yet abandoned housing types. The areas of interest for this presentation are the abandoned housing types themselves. Two particular buildings will be reviewed to see if larger parallels can be made that act as instruments for future situations that require difficult decisions. Who are the stakeholders, and how do they devise a process of evaluation that is pragmatic in its view forward, while sensitive to a problematic past?

The two buildings to be reviewed are a prison and an asylum. Both are forms of housing that are often neglected or forgotten by the larger population. Their histories are difficult and their advocates few. Their role in society does not lend them to a nostalgic view of the past and thereby make them difficult for preservationists to embrace.

Both these buildings are products of Appalachia. Their relationship to a unique region and culture will be explored as well. Their presence in an economically disadvantaged state led them to be used in their original purpose much longer than their historical colleagues in other states. This has given us the opportunity to still have these buildings largely as they were originally designed and built.

The former West Virginia Penitentiary at Moundsville was begun after the end of the Civil War, as the newly formed state needed a penal institution. It was largely built by prison labor during Reconstruction. It was closed in 1995 after a court of order of 1986 demanded that the state invest in a modern prison.

It was designed on the Auburn method of prisons. This 19th century method was the successor to the Philadelphia method which was based on Jeremy Bentham's Panopticon system. In that system, silence and solitary confinement was seen as the path to penal rehabilitation. With time, this was seen as inhumane. The Auburn method based on the state prison in Auburn, New York saw work and silence as the means to rehabilitation, but without solitary confinement. The prison was designed as a progressive model, but with increasing over population in the mid- 20th century, became known for its lawlessness and inhumane conditions.

The asylum at Weston was begun by the Commonwealth of Virginia prior to the Civil War. Its construction monies were seized by the Union Army and the new State of West Virginia after its formation in 1863. It was completed after the war and used until the mid-1990s when the state reduced its mental institutional capacity, building a newer and smaller facility nearby. It also went through a period of serious overcrowding that diminished its reputation. It was a primary facility in the development of lobotomy.

Its design was based on the Kirkbride model, devised by Dr. Kirkbride in the mid-19th century. The goal was to provide a new model of mental rehabilitation for an American situation. At the time, it was felt that the proper environment, as realized through appropriate architectural and landscape features, would enable healing of mental illnesses. The plans of a Kirkbride hospital have linear wings that telescope back from a central administration building, providing light and air throughout.

Both buildings still exist. Both buildings are immense stone constructions that defy easy renovation or demolition. Both were sold by the State of West Virginia to private owners and developers. Both are currently used for 'ghost tours', film production and police training. While a review of literature shows some successful reuse and adaption of such facilities in other states, it is rare. Many comparable buildings have been lost.

The goal of this presentation is not to provide an easy adaptive housing strategy. This presentation and paper do not provide the answer to this question of reuse. The aim is to bring focus to an ignored but important opportunity. The histories of these particular housing types deserve attention, sensitivity and creativity in how we make decisions for their future. The appropriate stakeholders need to be identified and a process of decision making that reflects the broader concerns of the society they served needs to be implemented.

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UNDERGRADUATE RESEARCH: IS IT ON YOUR RADAR?

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Introduction

Undergraduate research has had a prominent role in the strategic plan for both Virginia Tech and the College of Liberal Arts and Human Sciences. The college developed an Undergraduate Research Institute and began publishing a journal for undergraduate research in 2009. However, few faculty took time to become involved even after research participation became a specific part of the faculty annual review. Because of the applied focus of the programs in our Department of Apparel, Housing and Resource Management, students participated in experiential and service learning, but not formal undergraduate research. Moreover, faculty were busy directing graduate students' research and often failed to see the value/reward for collaborating on research with undergraduate students. As faculty, we knew that we should be involved. However, our paradigm only allowed us to view undergraduate research as a separate course designed specifically for faculty/student interaction on a research project for the purposes of creating new knowledge. Over time we came to recognize that this paradigm was limiting the possibilities of undergraduate research. This presentation will share with you our journey to expand our paradigm and will explore components of a successful undergraduate research experience as illustrated by case studies. In conclusion, we will share some benefits and challenges for both students and faculty and lessons learned throughout this paradigm shift.

Literature Review

The Council on Undergraduate Research (CUR) is a national organization that provides leadership to colleges, universities, and individuals regarding undergraduate research programs, publications and outreach activities, and assistance in improving and assessing the research environment ("About CUR", 2011). According to Wenzel (1997), they define undergraduate research as "an inquiry or investigation conducted by an undergraduate student that makes an original intellectual or creative contribution to the discipline." Jenkins and Healey (2009), however, expand the definition of undergraduate research as students learning through courses which are designed to the research processes in their discipline. The focus then is on student learning and on being assessed in ways that mimic how research is conducted in the discipline. In these cases, what is produced and learned may not be new knowledge per se; but it is new to the student and, perhaps more significantly, transforms their understanding of knowledge and research." When the research process is incorporated into the curriculum it could be as beneficial as new knowledge-based research. In the following case studies both types of undergraduate research are explored.

Case Studies

One student worked with a faculty member on a project that examined the career influences of residential property management graduates. For her three-credit project she met with the research supervisor who directed individualized study on research methods, survey techniques, analysis and dissemination of results. The student was in charge of the survey distribution and coding and was involved in the analysis and written summary. She developed and presented PowerPoint presentations at one national and one regional industry related event and at the university's graduate symposium and at the departmental undergraduate research symposium where she received a first place award.

Another student participated in an undergraduate research project with a faculty member where social media was employed as an instructional method in an undergraduate course. He was responsible for surveying students, and collecting and analyzing data. In order to be successful with the research, he had to first understand and demonstrate competence with instructional methods and social media platforms. Throughout his three-credit research project, he met with his supervisor regularly who

reviewed completed work, assigned tasks, and answered questions. He was accepted to participate in two undergraduate research symposia, one at the departmental level and the other at the university level. He also showcased his research with accepted abstracts at two industry conferences.

Over time we realized that this was not the only way students could and should be involved in research that would benefit them in the future. In fact, we teach a capstone course in our curriculum that is required the last semester before graduation by all students in property management. The knowledge and skills acquired throughout the previous years are culminated in a semester-long group project. The Community Analysis project analyzes a multifamily rental property for operational and net operating income performance and maximum profitability. Students are evaluated for expanding their knowledge of multifamily rental operations and asset management, and for also increasing their skills in researching, identifying, and utilizing resources. The Community Analysis requires the groups to obtain data related to all facets of a property's operations, i.e. financial, sales and marketing, capital expenditures, staffing, etc. Students must also research data related to neighborhood and regional areas, such as total housing units, economic climate, and employment. Upon receipt of this information, students must analyze this data to recommend a highest and best use alternative based upon their research.

Student and Faculty Benefits and Challenges

The presentation will examine some of the student benefits and challenges for both the individual and curriculum-based research experiences such as developing the research questions, probing for sources of information, and formulating rational conclusions. Linking the research process to employability can help motivate students. Faculty benefits such as opportunities to involve students with existing research projects and challenges relating to student motivation, lack of prior research knowledge, and dealing with student schedules will also be explored.

Lessons Learned

This experience has resulted in a paradigm shift for the faculty involved. While we remain excited about the opportunity to work individually or with small groups of students on research that will produce new knowledge, we also have validated the importance of incorporating the research process into a capstone course that allows students to demonstrate their ability to apply this knowledge to practical applications in their chosen careers.

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PREDICTORS OF LEVEL OF MORTGAGE DEBT AMONG OLDER ADULTS IN THE UNITED STATES BETWEEN 2006 AND 2008

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Introduction and Literature

Home prices in the U.S. peaked in mid 2006 then fell rapidly. By 2008, home prices reached 2004 values (Standard & Poor's, 2009); by 2011 prices reached 2002 values (Standard & Poor's, 2012). Such reductions may have negative financial consequences for older homeowners with a mortgage. This study is an extension of Green-Pimentel (2011) which examined predictors of level of mortgage debt (LMD) among household heads age 65 and older in the U.S. in 2006, the peak of the housing boom. The objectives of the current study are: 1) Examine the predictors of the LMD among household heads age 65 and older in the U.S. in 2008, after the initial housing market decline. 2) Create a financial profile of 2008 mortgage holders. 3) Compare the predictors of the LMD for household heads age 65 and older in the U.S. in 2008 with those in 2006, using results from Green-Pimentel (2011). 4) Compare the financial profile of 2008 mortgage holders with those in 2006, using Green-Pimentel (2011).

Limited literature exists examining mortgage debt among older adults (Masnick, Di, & Belsky, 2006; Lee, Lown, & Sharpe, 2007; and a few others). The conference presentation will expound on the literature. This study contributes to the literature by specifically examining the predictors of LMD held by homeowners age 65 and older both before and after the housing boom. This study will benefit homeowners preparing for retirement and the financial professionals who assist them. The professionals may gain insight for advising mortgage holders regarding asset accumulation and withdrawal.

The life cycle income hypothesis (LCIH; Modigliani & Brumberg, 1954) assumes that as individuals near retirement they cease borrowing and increase savings, with the intent to spend savings in retirement to maintain their standard level of consumption through life expectancy. Thus, one may assume individuals age 65 and older would have little to no debt and be in or nearing retirement.

Methods

This study used the 2006 and 2008 waves of the Health and Retirement Study (HRS). The HRS is ideal for this study because of its focus on adults age 50 and older, national representation and comprehensive information on respondents' finances. The sample to address objectives 1 through 4 consists of 1,672 (5,512,764 weighted) household heads age 65 and older holding mortgage debt in 2008. The second sample, also used to address objective 3 and 4, consists of 1,647 (5,207,782 weighted) household heads age 65 or older holding mortgage debt in 2006. Both samples include the same respondents, save a few additions in the 2008 data.

Research questions

- 1- What are the predictors of level of mortgage debt among household heads age 65 and older in the U.S. holding a mortgage in 2008?
- 2- What is the financial profile of household heads age 65 and older in the U.S. holding a mortgage in 2008?
- 3- How do the predictors of level of mortgage debt of household heads age 65 and older in the U.S. holding a mortgage in 2008 differ from those holding a mortgage in 2006?
- 4- How does the financial profile of household heads age 65 and older in the U.S. holding a mortgage in 2008 differ from those holding a mortgage in 2006?

Variables

The dependent variable for question 1 is level of mortgage debt (LMD) in 2008 dollars. There are two dependent variables for question 3, LMD for 2008 respondents, in 2008 dollars, and LMD for 2006

respondents, in 2006 dollars. LMD includes first and second mortgages as well as balances on home equity lines of credit and home equity loans. Independent variables are outlined in the models below. These variables were chosen based on relevant literature (Lee, et al., 2007; Masnick, et al., 2006 and others). Each variables' measurement will be explained in the conference presentation.

Model 1 – for 2008 data

$$\text{LMD08} = \alpha_0 + \alpha_1 \text{Level of Income08} + \alpha_2 \text{Level of Assets08} + \alpha_3 \text{Level of Consumer Debt08} + \alpha_4 \text{Age08} + \alpha_5 \text{Male08} + \alpha_6 \text{High School Graduate08} + \alpha_7 \text{College08} + \alpha_8 \text{Divorced/Separated08} + \alpha_9 \text{Widowed08} + \alpha_{10} \text{Employed08} + \alpha_{11} \text{Hispanic08} + \alpha_{12} \text{Black08} + \alpha_{13} \text{Health Status08} + \epsilon$$

*Model 2 – for 2006 data **

$$\text{LMD06} = \beta_0 + \beta_1 \text{Level of Income06} + \beta_2 \text{Level of Assets06} + \beta_3 \text{Level of Consumer Debt06} + \beta_4 \text{Age06} + \beta_5 \text{Male06} + \beta_6 \text{High School Graduate06} + \beta_7 \text{College06} + \beta_8 \text{Divorced/Separated06} + \beta_9 \text{Widowed06} + \beta_{10} \text{Employed06} + \beta_{11} \text{Hispanic06} + \beta_{12} \text{Black06} + \beta_{13} \text{Health Status06} + u$$

*from Green-Pimentel (2011)

Procedures

Data were examined for outliers using Cook's Distance, influential outliers were removed. Data were examined for multicollinearity using Variance Inflation Factor and Spearman and Pearson Correlation Coefficients. The final models do not have collinearity problems. The analysis used weights to account for the clustered and stratified sample of the HRS. Ordinary least squares regression (OLS) was used to examine research question 1. Question 3 used two OLS models, one each for the 2008 and 2006 data. The model and results for the 2006 data are from Green-Pimentel (2011). Descriptive statistics were used to examine research questions 2 and 4. Question 4 used results from Green-Pimentel (2011) for the 2006 data, results were inflated to 2008 dollars for a more equitable comparison with the 2008 data.

Results and Conclusions

Detailed discussion of the results will occur in the conference presentation. In brief, this study found that similar predictors influence level of mortgage debt (LMD) for mortgagees in 2006 and 2008. This was consistent with literature (Lee, et al., 2007) and expected as both samples consist of the same people save a few additions in 2008. The results also indicate that on average LMD increased from 2006 to 2008 while home values decreased, a counter intuitive outcome as the decision to increase LMD ought to be based in part on increases in home value. Financial professionals can use the results of this study to better recognize those who may maintain a mortgage as they age, then education can be provided regarding the consequences of such decisions and the implications of having insufficient assets for retirement. Limitations and suggestions for future research will be discussed in the presentation.

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SPATIAL BEHAVIOR OF OLDER ADULTS IN VIRTUAL ENVIRONMENT

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Rationale

The virtual environment (VE) becomes very useful to study active aging and participation. The VE is a simulated environment that a computer generates. Physical activity levels for those who live in low SES (socio-economic status) neighborhoods (and very often high crime areas too) were significantly lower than for those who live in medium to high SES neighborhoods (Parks, Housemann, & Brownson, 2003). Low or poor quality of street maintenance and vandalism were the major barriers of low physical activity level in low SES neighborhoods (Heinrich et al., 2008; Mota et al., 2007). In addition, inner-city low-income neighborhoods are usually correlated with the high crime rates and vandalism. Taking elderly people to such a fear-generating real environment can be problematic and unethical. Computer-generated VE would enable them to take a virtual walk. A new tool is needed to evaluate the impacts of the built environment on active participation. As many local communities are required to shift their planning strategies from transportation-based approach to pedestrian-based travel, there was a clear need to go beyond efforts at collecting purely descriptive data to convey appropriate programs and technology. Reflecting the needs, we aimed to construct a VE and conducted oral narratives from older adults to listen to their virtual walking experiences.

Methods

The study site was in Vancouver Chinatown, British Columbia, Canada. The core part of Chinatown is two kilometers from the intersection of Pender Street and Columbia Street bound by Carall, Gore, Union and Hastings Street (City of Vancouver, 2009). This is the poorest neighborhood in Canada which is notorious with the drug use and rising of crime (Anderson, 2007; Walks & Maaranen, 2008). At the same time, this is one of neighborhoods with the highest percentage of seniors in the Metro Vancouver area and the city has recently proposed to make the area more age-friendly (City of Vancouver, 2010).

To construct the VE, first an environmental audit was conducted. The environmental audit was performed at the level of segments. Using the Seniors Walking Environmental Audit Tool-Revised (SWEAT-R), we assessed walkability of seven street segments between the community center and T & T supermarket which is the two most frequently visited places among the Chinese senior residents. Items on the SWEAT-R include four topic areas: (1) functionality (e.g., land use, building types, and sidewalks); (2) safety (e.g., lighting and traffic safety); (3) aesthetics (e.g., quality of micro-scale urban design); and (4) destination (e.g., availability of senior oriented housing and services/amenities) (Michael et al., 2009). Pictures of buildings and streets were also taken at each segment and we kept observation notes regarding detail materials, traffic volume and social interactions at public spaces. These pictures provided textures in constructing the VE.

Then using a 3D modeling software package (Maya), 3D models of the buildings, streets, trees, people, and all the detailed objects (e.g., traffic signs and coin parking meters) were built. After applying the textures onto the 3D models, lights were set up with proper intensity and locations. These 3D models were then imported to a game engine (Unity 3D) so that participants could interact with the VE. A Nintendo Wii remote controller was used as an input device to experience the virtual walk.

Participants

A total of 21 seniors participated in oral narratives experiencing the virtual walk and facilitated using Chinese and translated in English. They were recruited through the neighborhood community center. They ranged from 65 to 88 years in age; 11 participants were male and 10 were female. About 90% of the participants had lived in Canada more than 10 years, and 76% of the participants had high school diplomas and/or college degrees. They had no previous experience using the VE.

Oral Narratives

The oral narratives took place in a room at the community centre for the convenience of inviting elderly participants who visited the centre frequently. The VE was played on 46 inch LCD TV and each session lasted 30-90 minutes. Before the oral narratives the participants learned how to use the Wii remote controller. The participants explored the text-run VE which was designed to learn how to use the Nintendo Wii remote controller. Then oral narratives were conducted. Each participant was asked to navigate the VE from the community centre to the T&T super market. Four routes led to the destination. While navigating, their choices of routes were observed and recorded. Participants were asked to talk about their reasons and any features for their choices made. Finally after the oral narratives, we collected participants' demographic information and asked their overall experience using the VE.

Results

Among the total participants (n=21), 19 reached to the destination successfully and 2 dropped. Four routes led to the destination: either via Pender Street, Carrall Street, Taylor Street or Shang-hai Alley. Of the successful attempts to reach the destination, 9 participants selected the route through Taylor street which was relatively quiet and 8 participants selected the route through Pender which was very busy. When the participants were asked reasons for their choice of route, the majority of them mentioned their safety and shortest routes. Especially selecting the shortest route (Taylor) was related to the level of mobility limitation of the participants.

As of the questions asking participants' experience of using the VE, the majority (16) of participants said that they navigated the VE as if they navigated in the real environment and over half of participants (13) felt that the experience was very similar with playing a video game. However, only about the half of participants (12) agreed that it was definitely easy to learn how to navigate the VE and somewhat all the participants experienced some degree of dizziness.

Conclusions

Well-designed communities promote active aging and participation. Although the participation and physical activity level is low in low-income neighborhoods, since inner-city low-income neighborhoods are usually correlated with the high rates of crime and vandalism it is not easy to conduct research in a real environment. The VE can greatly reduce ethical issues since there would be no real physical risk of danger.

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ENERGY-EFFICIENCY AND OCCUPANT SATISFACTION IN LEED-CERTIFIED HOMES

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BACKGROUND

Sustainability of individual homes is measured by various parameters. The three major rating systems available may be Leadership in Energy and Environmental Design (LEED) for Homes (U.S. Green Building Council, 2011), National Green Building Program (National Association of Home Builders, 2011), and ENERGY STAR home rating system (Environmental Protection Agency, 2011). Of these, the LEED for Homes rating system considers various aspects through proposing such categories as Innovation & Design Process, Location & Linkages, Sustainable Sites, Energy & Atmosphere, Materials & Resources, and Awareness & Education (U.S. Green Building Council, 2009a). These categories may significantly address home energy efficiency and occupant health in the home environments. Therefore, LEED-certified homes are expected to be more energy efficient and healthful for occupants than their counterparts.

However, because this LEED rating system is a new one for the U.S. Green Building Council compared with other rating systems, it is hard to find empirical data sources that examined if these homes are energy efficient and provide healthy indoor environments for occupants. As more houses pursue this path, however, it is valuable to examine whether LEED-certified homes are truly energy efficient and contribute toward occupant health for promoting sustainable housing design and development strategies in the future. This study explored occupant residential satisfaction in LEED-certified homes and opinions on their health in those houses.

PURPOSE AND OBJECTIVES

The purpose of this study was to evaluate LEED-certified homes' energy efficiency and contribution toward occupant health through investigating occupant perceptions and satisfaction. Residents were asked to evaluate (1) energy efficiency of their homes and (2) level of satisfaction with indoor environmental quality possibly affecting their health. They also noted general satisfaction level and health condition in their homes. This study sought to discuss future directions of green homes for improving energy efficiency and occupant health.

METHODOLOGY

This study targeted U.S. LEED-certified homes based on USGBC data. A list of LEED-certified home addresses was obtained by a LEED-certified home provider located in Michigan. A mailed survey was designed to get opinions of LEED-certified-home residents. The Occupant Satisfaction Survey tool provided by the Center for the Built Environment (CBE) at the University of California at Berkeley was used to gather and analyze user feedback on the performance of green homes. This survey tool is recognized as a reliable post-occupancy evaluation tool for measuring occupant's opinions and evaluation of green buildings (Lee & Kim, 2008). Because our subjects were homes not commercial buildings, however, several words from the tool were replaced to be more appropriate for residential settings. For instance, instead of "the air quality in your building or office space" in the original tool, "the air quality of your home" was used in the survey tool.

The overall questions for the survey investigated occupant perceptions and opinions about energy efficiency and indoor environmental quality of their homes. This research survey was conducted through collaboration with the Office for Survey Research at Michigan State University, from September 2011 to March 2012.

MAJOR FINDINGS

(1) General Information on Survey Participants and Homes

A total of 236 residents living in 236 LEED-certified homes responded to the survey. Among them, 57.5% were female and 42.5% were male. Residential states reported by respondents were: Michigan (55.7%), Ohio (25.7%), Indiana (9.1%), Minnesota (4.3%), Wisconsin (2.6%), Illinois (1.7%), and Missouri (0.9%). The LEED for Homes rating system has four levels of certification: Platinum, Gold, Silver, and Certified. A home needs to earn 90 to 136 points to be platinum certified, 75 to 89 points to be gold certified, 60 to 74 points to be silver certified and 45 to 59 points to be certified (USGBC, 2008). About 21.9% of this study samples were silver certified, and 15.8% were platinum certified. Surprisingly, 38.6% of the respondents did not remember the level of certification their home achieved. More detailed results will be presented at the conference.

(2) Energy Efficiency of LEED-Certified Homes

Results showed 86.3% of the total respondents evaluated their homes as highly energy efficient. Using a seven bipolar scale from 1 (never energy efficient) to 7 (extremely energy efficient), more than 43.8% ranked their homes as extremely energy efficient.

Resident perceptions of their homes' energy efficiency differed depending on demographic or housing characteristics. Owners (Mean = 6.09) perceived their homes as more energy efficient than renters (Mean = 5.53). Gold-certified home residents (Mean = 6.21) perceived their homes as more energy efficient than the other groups. The mean value for platinum-certified homes (Mean = 6.13) was even lower than that for gold-certified ones, also indicated in several previous studies (see USGBC, 2009, p. 23).

(3) Occupant Satisfaction with Indoor Environmental Quality in LEED-Certified Homes

Survey participants were asked to rate their satisfaction with selected indoor environmental-quality items such as temperature, humidity, air quality, amount of daylight, comfort of artificial light, and acoustic quality in all their homes. These items affect occupants' psychological or physical health either directly or indirectly (USGBC, 2009, p. 80).

Results showed respondents were most satisfied with "amount of daylight in your home" (Mean = 6.18). The next two most-satisfied items were "comfort of artificial light" (Mean = 6.01), and "indoor air quality" (Mean = 6.00), while the two least-satisfied items were "acoustic quality" (Mean = 5.69) and "humidity" (Mean = 5.74).

(4) Occupant Overall Satisfaction and Health Condition in LEED-Certified Homes

Results strongly indicated 92.3% of total respondents were satisfied with their current homes. In fact, 53.0% of respondents were very satisfied with their homes, while only 1.7% were very dissatisfied.

Since moving to current LEED-certified homes, 60.0% of respondents agreed the health of household members had improved. They indicated at least 5 points out of 7 (strongly agree). We did not include responses indicating 4 points (neutral) for these positive opinions. About 12.2% disagreed with the health-condition improvement of their household members.

CONCLUSIONS AND SUGGESTIONS

This study explored residents' perceptions of energy efficiency and satisfaction with indoor environmental quality in homes LEED-certified by the U.S. Green Building Council. Overall perceptions of energy efficiency were very positive. More than a majority of respondents were highly satisfied with various items selected from the indoor environmental-quality aspect. Overall satisfaction with LEED-certified homes was also high. However, we found several aspects to be improved in future LEED-certified homes.

First, resident perceptions of home energy efficiency differed depending on four certification ratings, as explained in (2) Energy Efficiency of LEED-certified Homes. It is thus necessary to examine actual energy-efficiency of homes depending on these four levels in addition to residents' opinions on their homes' energy efficiency to prove and reduce actual gaps in energy-efficient functions of green homes.

Second, temperature and humidity significantly affect occupant thermal comfort (Lee & Kim, 2008). However, respondent satisfaction levels with these two items were relatively lower than the other indoor environmental-quality items, indicating that LEED-certified homes still need to improve thermal comfort for occupants.

Third, the acoustic quality was less satisfied by residents. Several previous studies verified this problem in LEED-certified buildings (see Lee & Kim, 2008). Similarly, respondents living in LEED-certified homes were less satisfied with the acoustic quality than with any other aspects. We thus suggest building materials and construction techniques to improve the acoustic quality should be considered. These three major suggestions can be applied in future green-home development and designs.

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OLDER ADULTS' REASONS FOR MOVING INTO MULTIFAMILY HOUSING

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Introduction

Older adults are a diverse group and their moving can be stimulated by several reasons such as change in lifecycle stage and lifestyle, and previous housing experience (Clough, Leamy, Miller, & Bright, 2004; Lawton & Nahemow, 1973; Litwak & Logino, 1987; Rossi, 1955; Wiseman, 1980; Wiseman & Roseman, 1979). Multifamily housing has been suggested as a viable residential option for older adults in later life because of its unique advantages such as maintenance services, amenities and low upfront fees (Haughey, 2003; Kwon & Beamish, 2010; Mitchell, Beamish, Goss, & Kwon, 2009). The choice to live in multifamily housing by older adults may be influenced by their socio-economic situations or lifestyles. The purpose of this study is to investigate reasons for moving into multifamily housing of residents 55 and older. This will include an examination of residents' previous demographic characteristics, their reasons for moving into current housing, and their current demographic characteristics.

Instrument Development

Previous demographic characteristics was composed of questions about respondents' previous situation before they moved into their current housing (*age, marital status, household size, health status, employment status, income, housing type, tenure type, length of residence, and number of bedrooms*).

Current demographic characteristics included changeable variables (*age, marital status, household size, health status, employment status, income, tenure type, monthly housing cost, primary residence, geographical location, length in current dwelling, presence of an elevator, year of construction, and number of bedrooms*).

To determine the reasons for moving into current housing, 46 items were developed, which were related to family composition, finance, health conditions, housing design, multifamily housing community amenities and services, neighborhood, and local area based on Wiseman and Roseman's (1979) typology of elderly migration, Wiseman's (1980) theoretical model of elderly migration process, Litwak and Longino's (1987) conceptual framework of elderly migration, and other previous studies (McAuley & Nutty, 1982; NAHB, 2009; NAHB Research Center & The Joint Center for Housing Studies of Harvard University, 2005). Participants were asked to evaluate importance of each item using a 5-point Likert scale.

Methodology

A self-administered questionnaire was developed for this study. The target population was people age 55 and older living in market-rate multifamily housing (i.e., non-subsidized and non-age restricted). The data were collected using convenience sampling during February, 2012 by an online survey company ($n=431$). Major reasons for moving into current housing were driven from exploratory factor analysis (EFA). T-test and ANOVA examined the associations between previous demographic characteristics and major reasons for moving. The statistical package of SPSS 16.0 was used and a significant level of $p<.05$ was chosen.

Results

At the time the respondents moved into their current housing, their mean age was 54.5 years old. Half of the respondents were male and the other half were female. Almost 40% of the respondents were married and 70% of the respondents had more than two household members. Most of the respondents (80%) had good or very good health, and more than half of the respondents were employed. Thirty-four

percent of the respondents had incomes of \$25,000 to \$49,999. Almost 45% of the respondents lived in non-multifamily housing before they moved into their current housing. Half of the respondents were owners, 34% lived six to 15 years in their previous housing, and 80% had more than two bedrooms.

Among the 46 reasons for moving into multifamily housing items, 22 had less than 3.0 mean scores out of 5 and were excluded to keep only items which were identified as important. From EFA, 24 items were grouped into three major reasons: the *multifamily living reason* (e.g., management and maintenance service, quality of the unit and building), the *nearby activities reason* (e.g., access to recreation, public transportation and shopping), and the *financial reason* (e.g., cost of living and change in financial status). The three-factor solution explains 55% of the total variance. Cronbach's Alpha values for inter-item reliability of items within each factor ranged from .666 to .861.

Respondents, who were relatively older, married or widowed, non-working, with more income, and more bedrooms in their previous housing, moved into their current housing for the *multifamily living reason*. People who retired and lived in multifamily housing before moved into their current housing for the *nearby activities reason*. Respondents who moved for the *financial reason* were more likely to have poorer health, lower incomes, and were less likely to work.

Currently, the respondents' mean age was 64.5 years old. Almost 40% of the respondents were married and half of the respondents lived alone. Sixty-five percent had good or very good health, and slightly more than 60% were retired. Thirty-four percent of the respondents had incomes of \$25,000 to \$49,999. Sixty-six percent rented their multifamily housing. The respondents spent \$500 to \$999 per month for their housing. More than half of the respondents lived in a two-bedroom unit. Almost 70% of their buildings were built before 1991, and did not have an elevator.

Conclusion

Three major reasons for moving into multifamily housing can be found in Wiseman and Roseman's (1979) reasons for moving in their typology of elderly migration, such as stress reason, maintenance needs, and need for socialization. The three reasons from this study also support some parts of Wiseman's (1980) triggering mechanism, push and pull factors, and indigenous and exogenous factors, as well as Litwak and Longino's (1987) first type of elderly migration.

Senior housing consumers can be classified by their socio-economic characteristics such as financial, health and marital status, rather than age. The reasons for moving into multifamily housing identified in this study would provide more specific information for determining which senior groups to target based on the socio-economic characteristics. One market to attract would be relatively affluent seniors who may move into multifamily housing to down-size and are attracted to the amenities of multifamily housing. A second market segment would be people who are already in multifamily housing and may prefer a different housing product. Finally, some seniors will perceive renting multifamily housing as a necessity and look for affordable housing products that will help them age in place.

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INFLUENCE OF HOME ENERGY COST ON HOUSING COST BURDEN OF URBAN RENTERS

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Introduction

From 2001 to 2010, U.S. renter households' home energy cost increased by 22.1% which exceeded three times of rent increase in the same period (Joint Center for Housing Studies of Harvard University (JCHS) (2011a, 2011b). JCHS (2011c) also indicates that households with lower income are more severely affected by an energy cost increase. These findings imply that energy cost burden of limited income renter households might play a critical role for the households' housing affordability and life quality. The purpose of this study was to examine impact of home energy cost on housing cost burden of renters living in urban areas and to explore influences of household characteristics on home energy cost and housing cost burden.

Methodology

American Housing Survey (AHS) from 2009 public-use microdata was used for the study. A total of 10,522 renter households living in urban areas that had positive income with housing cost not exceeding their income were included in data analyses. As it was assumed that households with different income levels have different energy costs and housing cost burden, target households were classified into income quartile groups. Among the four income groups, this study focused on two bottom income groups who might have more housing and home energy cost burden (than households with higher income as reported by JCHS) (2011c).

Data were analyzed to examine (1) influence of home energy cost on housing cost burden of four income groups and (2) influence of household characteristics and home energy cost burden on housing cost burden of bottom two income groups using path models. Four home energy cost variables were generated: Monthly home energy cost, energy cost-to-income ratio, energy cost-to-housing cost ratio and annual energy cost per square footage. Monthly and annual home energy costs were generated by adding costs of electricity, gas, fuel and oil. SPSS 17.0 was used for the data analyses.

Findings

Overview of Target Households

Lower income households, that were households in lower income quartile groups, were characterized to have a smaller household size, older householders, greater proportion of White or female householders and householders with lower educational attainment. Lower income quartile groups tended to have a greater proportion of households living in multifamily structures and pay a larger percentage of household income on housing and energy cost.

Influence of Home Energy Cost on Housing Cost Burden by Household Income

Bivariate correlations between housing cost burden and each of four energy cost variables were examined by income quartile groups (Table 1). All energy cost variables showed significant correlations with housing cost burden and energy cost-to-income ratio were found to have the strongest correlation. To see the correlation coefficients, housing cost burden of lower income households was found more vulnerable to their energy cost.

Table 1. Correlation with Housing Cost Burden by Income Quartile Groups

| Item | Income quartile | | | |
|--------------------------|-----------------|---------|---------|---------|
| | Q1 | Q2 | Q3 | Q4 |
| Monthly home energy cost | .321*** | .290*** | .230*** | .156*** |
| Energy cost / Income (%) | .338*** | .332*** | .278*** | .286*** |

| | | | | |
|--|----------------------|----------------------|----------------------|----------------------|
| Energy cost / Housing cost (%) | -.114 ^{***} | -.186 ^{***} | -.220 ^{***} | -.245 ^{***} |
| Annual energy cost / Unit square footage | .189 ^{***} | .100 ^{***} | .083 ^{***} | .057 ^{**} |

Note. Pearson correlation coefficients (*r*) are presented. Households in 1st income quarter (Q1) had the lowest income and those in 4th income quarter (Q4) had the greatest.

** Pearson correlation significant at $p < .01$ level *** $p < .001$ level

Influences on Home Energy Cost and Housing Cost Burden: Path Models

Influences of household characteristics on energy cost-to-income ratio and housing cost burden of bottom two income groups were examined using separate path models. It was hypothesized that renters' energy cost-to-income ratio has a direct effect on housing cost burden (H1), and household characteristics have direct effects on energy cost-to-income ratio, and direct and indirect effect on housing cost burden (H2). In path analysis, an indirect effect refers to an effect of an exogenous variable on an endogenous (dependent) variable through another variable and a direct effect refers to an impact of exogenous variable directly on endogenous variable. Significant covariances among household characteristic variables were also considered.

The path models explained 25 to 28 percent of energy cost burden and 18 percent of housing cost burdens of households in each income group. In both income groups, households in single-family structure, with larger household size or headed by Black householder tended to have greater energy cost burden. Four home structures types of this study (single-family housing, 2 to 4-unit structure, multifamily housing, manufactured (mobile) home) were recoded as three dummy variables (2 to 4-unit structure, multifamily housing, manufactured (mobile) home). As effects of the three home structure dummy variables were found negative, it was interpreted that the other home structure type (single-family housing) had positive effects on housing cost burden.

Among households in the first bottom income quartile group, households with younger or female householder tended to have greater energy cost burden. Households in both income groups with greater energy cost burden or household size, less number of children under age 18, or living in single-family structure tended to have greater housing cost burden. Details on the path analyses and the path models will be presented at the conference.

Conclusions

It was found that energy cost had a significant influence on housing cost burden of urban renter households. Also, housing cost burden of lower income households was more severely affected by their energy cost. Households renting single-family units tended to have an even greater housing cost burden. In previous energy research studies such as Emmel, Lee, Cox and Leech (2008) that was conducted on low-income owner and renter households in Virginia, it was found that many low-income households had to negotiate spending for necessities such as grocery or medicine in order to afford energy cost but perceived energy saving behaviors not very helpful for their energy affordability. Thus energy saving education expecting behavioral changes may not be sufficient to improve renters' energy cost burden. In addition, renters cannot alter their home structure (e.g., weatherization) for energy efficiency to save heating expense which usually is a major home energy cost for most households. Considering the situations, the solutions for low-income renter households' energy affordability issues might be adjusting home energy cost by income levels or local and/or federal support programs for landlords to weatherize their rental units.

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POST-COLLEGE HOUSING SITUATION OF YOUNG PEOPLE IN THE UNITED STATES AND IN KOREA

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Introduction

Over the last couple of years, economic recession has affected many individuals' and households' finance both in the United States and in Korea. They have affected young persons who have had a more difficult time to find a stable job with a satisfactory salary. Many college graduates do not have enough resources saved to afford paying for housing and living expenses after completing their school as they have not had sufficient income even to afford their tuition. For these reasons, there has been a unique trend among U.S. college graduates to move back to their parents' home after completing their study since early 2000 (Bacheller, 2010) or to get their parent's help to afford separate housing. Thus, housing affordability problems of the young college graduates could be shifted to their parents giving them additional financial burden. In Korea, there are many college graduates exposed to lower quality housing units in less safe neighborhoods to find affordable housing units (Byun, 2011; Lee, 2011).

This was an exploratory study to approach young professionals' housing situation and housing cost burden issues from diverse perspectives. The purpose of this study was to investigate current housing situation of college graduates in their 20s reflected in existing national survey data to explore young people's housing choices after their graduation in the United States and Korea.

According to information from recent U.S. Census Bureau and the Statistics Korea, persons with bachelor's degree or higher educational attainment comprised 19 percent of population in their 20s in the United States and 26.6 percent in Korea (Table 1).

Table 1. Population in their 20s with bachelor's degree or higher educational attainment

| | 2011 US ^A | 2010 Korea ^B |
|--|----------------------|-------------------------|
| Total population age 20-29 years (a) | 51,033,000 | 6,594,369 |
| Population age 20-29 years with bachelor's degree or higher educational attainment (b) | 9,704,000 | 1,754,674 |
| (b) / (a) * 100 (%) | 19.0 | 26.6 |

^A Source: U.S. Census Bureau. <http://www.census.gov/hhes/socdemo/education/>

^B Source: Statistics Korea. http://kosis.kr/abroad/abroad_01List.jsp?parentId=A

Methodology

Among existing national surveys whose microdata were made available to the public in the United States and Korea, the 2009 American Housing Survey and the 2011 Korean Household Budgetary Survey have information that best met the study purpose. Thus, these public-use microdata sets were used as secondary data for this study as they were most recent. In this study a young college graduate was defined as a person whose age is between 20 and 29 years and who holds a bachelor's degree or higher. Only households with the young college graduates were included in this study. As results, 3,196 persons in 2,541 households in the United States and 640 persons in 586 households in Korea were included.

Findings

Housing choices of young college graduates were classified into the following four major types based on the persons' relationship to their householders: (1) Householder him/herself or spouse or unmarried partner of householder; (2) child of householder; (3) other relative of householder; and (4)

unrelated to householder (Table 2). Results show that young college graduates in the United States seemed more independent than those in Korea: About 23 percent of the target college graduates were living with their parents in the United States while 66.3% lived with parents in Korea. Living with unrelated roommates was found to be a very rare situation in Korea.

Table 2. Relationship of Young College Graduates in Their 20s to Householder

| Relationship | United States | | Korea | |
|---|---------------|---------|-------|---------|
| | n | Valid % | n | Valid % |
| Householder or Spouse/unmarried partner | 2,066 | 64.6% | 186 | 29.1% |
| Child of householder | 745 | 23.3% | 424 | 66.3% |
| Other relative of householder | 77 | 2.4% | 27 | 4.2% |
| Unrelated to householder | 308 | 9.6% | 3 | 0.5% |
| Total | 3,196 | 100.0% | 640 | 100.0% |

The housing cost burden of households headed by young college graduates was compared with that of the rest of target households using independent sample t-test (Table 3). Housing cost burden was calculated as the percentage of housing costs out of household income. In the United States, the housing cost burden of households headed by young college graduate did not show any significant difference with that of other households with young college graduate(s). In Korea, however, households headed by young college graduate showed significantly greater housing cost burden than other households with young college graduate(s).

Table 3. Housing Cost Burden Comparison of Household Headed by Young College Graduates and Other Households with Young College Graduates

| | n | Mean | t-test | | |
|---|-------|--------|--------|----------|------|
| | | | t | df | sig |
| United States | | | 1.873 | 1462.959 | .061 |
| Households headed by young college graduate | 1,319 | 159.95 | | | |
| Other households with young college graduate(s) | 1,222 | 44.50 | | | |
| Korea | | | 2.280 | 102.705 | .025 |
| Households headed by young college graduate | 102 | 13.31 | | | |
| Other households with young college graduate(s) | 484 | 6.29 | | | |

Conclusions

In the United States, the most popular housing choice of young college graduates in their 20s were found to live independently from their parents while living with parents seemed most popular to Korean young college graduates. Although statistical differences were not found among the U.S. target households, households headed by young college graduates seemed to have a greater housing cost burden than other households in both countries. In separate analyses that were not included in this paper, households headed by young college graduates showed significantly lower household income than other households with young college graduates in both countries. It is easy to guess that a major reason of young college graduate-headed households' lower income was because they are relatively young and new in their job and their wage and salary was relatively low.

This was an introductory level study to approach young professionals housing situation and housing cost burden issues from diverse perspectives. To better understand the young professionals' housing situation in order to imply suggestions for design or policy development, structured surveys should be conducted focusing on the areas with great number of the target population.

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HOUSING AFFORDABILITY ISSUES OF BABY BOOMERS

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Introduction

Presently, there has been an attention to Baby Boomers because the recession of 2007-2009 brought an unexpected blow to the retirement security of the oldest boomers (Butrica, Johnson, & Smith, 2011). A decrease in housing values and retirement funds in past years in the U.S. has led them to face housing challenges and a reconsideration of retirement age. According to the American Association of Retired Persons, about 32% of those who aged 50 and over report that the value of their homes have dropped down in the past few years, and experts foresee that many people will not recover the wealth by the time they reach retirement age (Hessedal, 2011). Currently, more Baby Boomers have reached to their 60s. Considering this demographic segment, it is projected that Baby Boomers will face housing affordability issues as they age. This affordability issue is more likely to affect older groups who are close to their retirement age than younger adults in that they do not have enough time left to redirect their long-term financial plans and realize gains (Butrica, Johnson, & Smith, 2011). This fact might lead them to select unexpected housing choices.

Purpose

This study examined housing affordability issues of Baby Boomers. Specific research objects were (1) to identify housing and demographic profiles of the U.S. Baby Boomers and (2) to reveal the relationships between housing and demographic characteristics and the housing affordability of Baby Boomers in the U.S.

Methodology

The national sample of 2009 American Housing Survey was employed. The useable sample was 16,092 Baby Boomers (45 to 63 years old as of 2009), which was 24.6% of the total U.S national sample. The dependent variable was housing affordability having 0 (unaffordable if housing cost is equal and greater than 30% of their family income) and 1 (affordable if housing cost is less than 30% of family income). Descriptive statistics were employed to define the housing and demographic profile of the sample and a binary logistic regression was used to reveal the relationships between the housing affordability and housing and demographic profile of Baby Boomers. A null hypothesis was developed for this study.

Findings

Profile of Baby Boomers

Thirty five percent of the sample faced housing affordability issues. More than half of Baby Boomers (53%) had mortgages. Only 3% of Baby Boomers received a government loan/grant for alterations or some type of government mortgage, and 4% received government rental assistance. The average monthly mortgage payment was \$1,352, and average monthly rent payment was \$819.

Only 25% had full amenities. Almost 76% were homeowners, and 72% lived in single detached housing. Almost 43% of Baby Boomers lived in housing units built before 1969, followed by 18% in housing units built from 1970 to 1979. The average structure size was almost three bedrooms ($M = 2.95$), and housing adequacy was relatively high with $M = 1.94$ (0 to 2 range). Satisfaction levels in housing units and neighborhood were relatively high with $M = 8.31$ and $M = 8.14$ respectively (10 being best and 1 being worst).

Average age of the sample was 54 years old. Almost 32% lived in South, followed by the Midwest (26%), and a high proportion of Baby Boomers lived in urban areas (65%). A third reported their education levels as Bachelor's degree or more. Almost 41% earned family income of less than \$50,000. Only 6% received government income assistance. More than half were married (59%) and males (57%). Seventy three percent were non-Hispanic Whites, followed by 12% of Blacks. Average household size was 2.54.

Housing Affordability Relationships

The full model was statistically significant with $\chi^2(31, N = 16,092) = 2,224.126, p < .05$. The null hypothesis was rejected and it was concluded that there was a relationship between demographic and housing characteristics and housing affordability of U.S. Baby Boomers. Variables influencing Baby Boomers' housing affordability levels included education, geographical locations (region and central city/suburban), government income assistance, marital status, race/ethnicity, sex, amenities, built year, neighborhood rating, structure size, structure type, and tenure when controlling for other variables in the model. For example, Baby Boomers who completed high school graduate, some college or associate degree, and bachelor's degree or more were 1.4 times, 1.7 times, and 2.5 times, respectively, more likely to have affordable housing than those who had an education level with less than high school when controlling for all other variables in the model.

Conclusion/ Implication

Along with a question on how the recent distressed economy has influenced housing affordability, the authors investigated housing affordability of Baby Boomers who are, as a group, the most affluent generation in the U.S. From the study results, housing affordability levels of Baby Boomers were statistically significantly related to their demographic and housing characteristics. The strongest association was found under tenure status. Baby Boomers who were renters did less afford their housing than *homeowners* or those *occupied without payment for cash*. Generally, renters are less likely to have higher income than homeowners. Therefore, their future housing affordability will be more affected if they have fixed or decreased income and if the median gross rents continue to increase, like the trend in the last decade (U.S. Census Bureau, 2012). Another finding was that, as of 2009, more than a third of Baby Boomers experienced housing cost burdens and 'age' was not the significant factor influencing housing affordability. Those noteworthy findings imply that the distressed economy has negatively influenced Baby Boomers' finances and that 'getting older' would not guarantee their economic power anymore due to retirement insecurity (Butrica, Johnson, & Smith, 2011). Butrica and et al. (2011) reported that "for those age 55 to 59 in 2008, the Great Recession will reduce average age-70 incomes by 5 percent." Thus, the 2007-2009 recession will decrease lifetime earnings, by limiting savings and Social Security and pension incomes (Butrica and et al., 2011). Baby Boomers will face unexpected housing choices in future. Further analysis will be conducted to reveal in-depth relationships among factors which are related to the recent economic conditions.

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ENERGY SAVING KNOWLEDGE AND PRACTICES, AND FUTURE PLANS TO CONSERVE ENERGY: AN EXPLANATORY MODEL

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With the increasing interest in sustainability and a commitment to reduce dependence on foreign energy sources, households are once again examining ways to reduce energy use. The current economic crisis and rising energy costs have contributed to this interest, and studies regarding household energy saving practices have identified several variables that predict energy saving behavior. However, few studies have examined future plans of households in regards to saving energy and what variables might predict those future plans, including obstacles that keep households from making energy saving changes. The purpose of this study is to examine the relationship between household characteristics, energy saving practices and obstacles, and future plans to create a more energy efficient home.

Energy saving practices are defined as any behavior a household engages in that reduces their overall energy usage. It could be a major home improvement like installing energy efficient windows or something relatively simple like switching out incandescent light bulbs with compact fluorescent bulbs. A study by Gadeene, Sharma, Kerr & Smith (2011) showed that there was a strong association between environmental attitudes and energy saving practices. Likewise, certain demographic variables have been associated with energy saving behavior. Paco and Varejao (2010) found that women were significantly more likely to save energy than men; however another study found no significant difference between the sexes (Mainieri & Barnett, 1997). Age has been identified by several studies to be significantly related to energy saving practices, with younger individuals showing a greater propensity to adopt more energy saving practices (Getzner & Grabner-Krauter, 2004). Several studies identify a positive relationship between education level and energy saving practices (Roberts, 1996; Samdahl & Robertson, 1989). Also, household energy use appears to be related to socio-demographic variables such as income and household size, which affect opportunities and constraints for energy use (Abrahamse & Steg, 2009).

This study tested the following model:

Future Energy Saving Behaviors = f(Current Energy Practices, Obstacles to Saving Energy, Knowledge of Energy Saving Behaviors, Age, Education Level, Gender, and Household Income)

It was hypothesized that the demographic variables and energy saving knowledge would be significantly related to current energy saving practices and energy saving obstacles. It was also hypothesized that current practices and obstacles would have a significant direct relationship with future energy saving behaviors, while the rest of the variables would have an indirect effect on future energy saving behaviors.

The data for this study came from a mail survey sent to a random sample of households in a Midwestern state. Total sample size was 235, however one survey was eliminated from the data set because of extensive missing data, making the total N=234.

The energy knowledge variable was created by combining responses to 31 questions related to respondents' knowledge of various energy saving techniques. Survey participants could respond to each question by using a 5-point likert scale that ranged from no knowledge to very knowledgeable. Examples of items included in each question were: programmable thermostat, low-flow water fixtures, caulking, and weatherstripping. Reliability analysis showed an alpha = .96 for the knowledge variable.

To measure current energy practices, a similar technique was used. The 5-point likert scale for the 20 energy practices questions ranged from "never do" to "almost always do", and included such items

as “open and close blinds or curtains to reduce energy use” and “look for the ENERGY STAR logo when buying new appliances.” The reliability alpha coefficient for the current energy practices variable was .85.

The survey included 31 different items measuring future energy saving plans. A 5-point likert scale used with these items ranged from “No plans to do” to “Already have done or exists.” Items included such behaviors as: “Install or repair weatherstripping around doors and windows, and “Plant trees or other landscaping to provide a windbreak for your home.” These items were examined using factor analysis. Through principal components analysis using varimax rotation, 6 different types of behaviors emerged. They were: Quick retrofit activities, installation of insulation, traditional energy saving modifications, lesser-known energy saving modifications, and employing alternative energy resources. Reliability alpha coefficients for these variables were high, ranging from .65 to .87.

The obstacles variable was a compilation of different obstacles the household faced when making energy saving improvements to their homes.

The model was tested using multiple regression analysis. Results of the analysis are show in Table 1.

Results shows that none of the demographic variables were predictors of any of the future plans variables except gender was significantly related to quick retrofitting, with females being significantly more likely to plan small, inexpensive retrofitting projects in their homes. Also both education and age were significantly related to planning alternative energy retrofits. The more educated and younger the respondents, the more likely they were to be planning to employ an alternative energy source for their home energy needs. All the demographic variables were significantly related to the obstacle variable and explained 13 percent of the variation in that variable. The knowledge variable was positively related to the quick retrofit and insulation variables, and it was the only independent variable that was significantly related to current energy practices.

The obstacles variable was significantly related to installing insulation with the more obstacles perceived, the less likely an insulation retrofit was being planned. However, the energy practices variable was significantly and positively related to all of the future plan variables except the insulation variable. Diagram 1 shows the significant relationships of the total model.

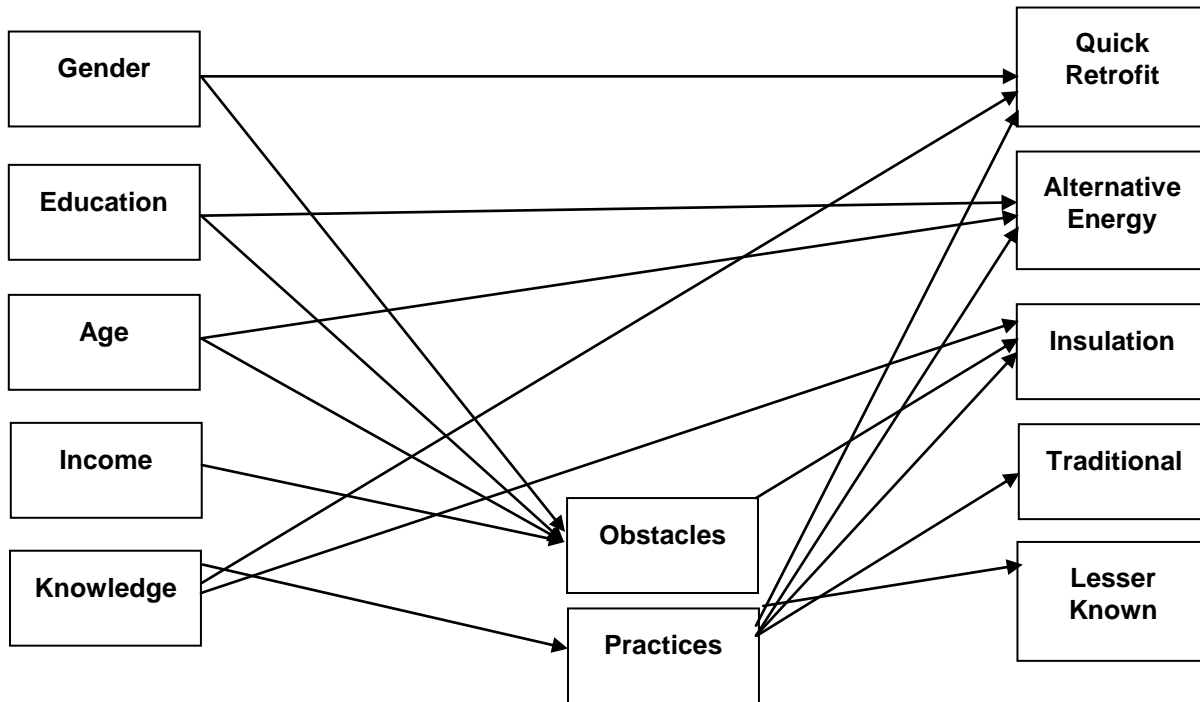
The results of this study have implications for housing educators, particularly those trying to educate the public on energy saving practices. Future research should further investigate the relationships between household characteristics, the obstacles they face in trying to achieve an energy efficient home, and their plans for energy saving in the future. In addition, variables like attitudes toward energy saving and energy costs could be added to the model to examine their explanatory power of future energy saving plans.

Table 1. Regression analysis of Future Energy Practices on Various Independent Variables.

| | Model 1 | | Model 2 | | Dependent Variable |
|--------------|----------|---------|----------|---------|-------------------------|
| | T | β | T | β | |
| Gender*** | -2.58 | -0.18 | -2.233 | -0.151 | Quick Retrofit |
| Education | 0.58 | -0.044 | 1.444 | 0.106 | |
| Age | -0.065 | -0.005 | -0.613 | -0.044 | |
| Income | -0.282 | -0.024 | -0.958 | -0.079 | |
| Knowledge*** | 4.086 | 0.282 | 2.041 | 0.143 | |
| Obstacles | | | -0.547 | -0.037 | |
| Practices** | | | 5.286 | 0.369 | |
| | R Square | 0.13 | R Square | 0.242 | |
| Gender | -1.551 | -0.111 | -1.347 | -0.099 | Alternative Energy |
| Education*** | 2.43 | 0.189 | 2.646 | 0.21 | |
| Age*** | -2.501 | -0.186 | -2.42 | -0.189 | |
| Income | -0.96 | -0.083 | -0.971 | -0.086 | |
| Knowledge | 1.68 | 0.119 | 0.933 | 0.072 | |
| Obstacles | | | 0.22 | 0.016 | |
| Practices** | | | 0.953 | 0.149 | |
| | R Square | 0.094 | | 0.114 | |
| Gender | -1.75 | -0.128 | -1.324 | -0.099 | Insulation |
| Education | -0.224 | -0.018 | 0.392 | 0.032 | |
| Age | 1.029 | 0.078 | 0.476 | 0.038 | |
| Income | -0.827 | -0.073 | -1.184 | -0.106 | |
| Knowledge* | 2.43 | 0.177 | 1.752 | 0.136 | |
| Obstacles | | | -1.642 | -0.123 | |
| Practices | | | 1.718 | 0.134 | |
| | R Square | 0.063 | R Square | 0.01 | |
| Gender | -0.476 | -0.035 | 0.129 | 0.01 | Traditional Techniques |
| Education | -0.92 | -0.074 | -0.378 | -0.031 | |
| Age | -1.42 | -0.109 | -1.83 | -0.146 | |
| Income | -0.368 | -0.033 | -0.627 | -0.057 | |
| Knowledge | 1.861 | 0.136 | 0.988 | 0.077 | |
| Obstacles | | | -1.184 | -0.089 | |
| Practices** | | | 2.234 | 0.174 | |
| | | 0.033 | | 0.067 | |
| Gender | -1.131 | -0.08 | -0.889 | -0.062 | Lesser Known Techniques |
| Education* | 0.629 | 0.049 | 1.377 | 0.104 | |
| Age* | -1.306 | -0.096 | -1.741 | -0.127 | |
| Income | 1.889 | 0.164 | 1.415 | 0.119 | |
| Knowledge | 1.825 | 0.128 | 0.029 | 0.002 | |
| Obstacles | | | -0.367 | -0.025 | |
| Practices** | | | 4.802 | 0.343 | |
| | | 0.104 | | 0.2 | |

* - Sig. Model 1 ** - Sig., Model 2 ***- Sig., Both Models

Diagram 1. Path model showing significant relationships



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HOMEOWNERSHIP IN THE POST-CRISIS ERA: STILL THE AMERICAN DREAM?

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INTRODUCTION AND PURPOSE

“The American Dream” is an expression familiar to all Americans and the realization of the American Dream is tied closely to homeownership (Clinton, 1995). The recent financial crisis, with housing and financial markets at levels not seen since the Great Depression, has resulted in widespread unemployment, continually dropping home prices, escalating home foreclosures, and tightened lending standards. Significant changes in the home buying behavior of Americans since the start of the crisis are clear; however, it is not clear if underlying perceptions of homeownership have become more negative in the wake of this catastrophe (Joint Center for Housing Studies [JCHS], 2011).

This study was grounded in a social constructionist theoretical framework. Among the social constructions of housing is a deep-seated preference for homeownership as the ideal tenure form. Everyday discourse serves to accentuate the positive aspects of homeownership along with the negative aspects of renting (Gurney, 1999). In light of current economic conditions and in the life experience of the “echo-boomer” generation, might the marriage of homeownership and the American Dream be a thing of the past?

The echo-boomer generation (defined as those born after 1980) comprises the largest group of Americans ever to reach their twenties—peak household formation years. They will play a critical role in the face of American housing in the years to come (JCHS, 2011). The overall purpose of this study was to investigate whether homeownership remains a goal for members of the echo-boomer generation. The study was centered on three primary research questions: (1) Do members of this population view homeownership as a safe investment? (2) What is the preferred housing tenure form amongst members of this population? and (3) Do members of this population view homeownership as part of the “American Dream?”

METHODOLOGY

The population of interest for this study was college students in the United States who are members of the echo-boomer generation. A chain-referral sampling technique resulted in a non-random sample of 256 participants. Although no claims of representativeness to the greater echo-boomer/college student population can be made, questions replicated those used in national studies and allowed comparisons of similarities and differences. Using local collegial networks and professional organizations, professors were contacted and invited to assist in recruiting study participants through means of an invitation letter sent via e-mail. Students were reached through participating professors who provided the explanation of the study and the link to the on-line questionnaire. Although this study focused on echo-boomer college students, no *a priori* filtering of participants took place. However, questionnaires completed by participants who reported birth years outside of the target range were excluded from data analysis. Of the 350 who participated in the study, 256 questionnaires met the age criteria.

Participants ranged in age from 18 to 21, with an average age of 21. Eighty percent were white non-Hispanic, and 81% were single. Seventy eight percent were female; 81% were undergraduate students while 19% were post-baccalaureate or graduate students. Thirty five majors were represented, although there were clusters of majors. Only 9% were homeowners (with or without a mortgage). Since the respondents for this research were college students, asking for specific income-levels was anticipated to be non-informative because many received assistance from their parents and/or financial aid. Instead, participants were asked to “indicate the adequacy” of their household income. For most (60%) income always or most always met their needs, while 21% said it rarely or never met their needs. Ten percent declined to answer this question.

SUMMARY OF FINDINGS

The questionnaire included both closed and open-end questions grouped around the three primary research questions. Following is a summary of findings in relation to the primary research questions.

(1) Do members of this population view homeownership as a safe investment? Simply put, yes. When asked directly, most participants (83%) responded “very safe” or “somewhat safe.” Only 3% felt it was very unsafe. A stepwise logistic regression was used to explore the predictor variables for this response. Predictor variables with $p < .05$ included participants’ expectation of the future direction of housing prices and of the economy, their preferred housing tenure, and whether homeownership was part of their own definition of the American Dream.

(2) What is the preferred housing tenure form amongst members of this population? The overwhelming majority of participants (76%) indicated that they preferred homeownership to renting. Logistic regression analysis suggested strong relationships between preferred housing tenure and whether the participants viewed homeownership as a safe investment, their preferred form of housing tenure, their belief about which housing tenure form made the most sense for them, and the adequacy of their income.

(3) Do members of this population view homeownership as part of the “American Dream?” When asked explicitly whether owning a home is part of their own personal American Dream, a large majority of (86%) of respondents said yes. Logistic regression analysis found that predictors of this view ($p < .05$) included expectation of rent prices, age, preferred tenure form, and whether participants saw homeownership as a safe investment. Qualitative analysis of open-ended questions revealed deep strong commitment to homeownership for reasons ranging from financial investments to family stability.

DISCUSSION AND IMPLICATIONS

This study was grounded in a social constructionist theoretical framework. Americans have traditionally held a deep-seated preference for homeownership as the ideal tenure form. In spite of a deep financial crisis and the heightened role of housing in it, homeownership seems to continue as the preferred housing tenure form among the echo-boom generation. Importantly, both quantitative and qualitative analysis of these data suggests that homeownership as the embodiment of the American Dream has been unaffected by the crisis. Although the current study is limited in that it is not a random sample from which generalizable conclusions can be made, the results are consistent with national research (Fannie Mae, 2011a; JCHS, 2011; Research Institute for Housing America, 2011).

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CLIENT EDUCATION AND IMPROVEMENTS ON ENERGY CONSUMPTION

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Louisiana Association of Community Action Partnership (LACAP) is a community action agency that administers the Weatherization Assistance Program (WAP) in Louisiana. The purpose of the WAP is to assist low-income households with their energy bills by providing home energy and efficiency services. The selection of WAP participants is based on household income levels (e.g. up to 200% of the poverty level). Then, local licensed and insured contractors following the Louisiana Priority List (LPL) do the repairs, at no cost to the occupants. Client education is the first priority of the LPL. Client education is critical to reap the true benefits of any energy improvement intervention, due to the importance of occupant behavior on energy consumption. Steemers and Yun (2009) concluded that occupant behavior is particularly significant for cooling energy in air-conditioned houses and that occupant behavior explained 47% of the energy consumption variance among houses. Furthermore, the authors offered the poor awareness of temperature settings as plausible explanation of the energy consumption variance, specifically in terms of the choices made about heating and cooling systems and their control.

The research objective of this paper is to evaluate the subjective perceptions of the homeowners whose houses were weatherized with regards to the weatherization outcome. In particular, it is of interest to learn the perceptions and experiences with regards to the LPL's priority #1 - perform client education. The data for this evaluation was collected as part of a major effort to assess the impact of the Louisiana WAP program with a random sample of 50 weatherized homes. The data collection entailed both occupant survey and energy bills for 12 months before and after the weatherization measures were implemented. The survey used was a modified version of S4 Occupant Survey used for the National Evaluation of the WAP during the ARRA Period: Program Years 2009-2011 by the Oak Ridge National Laboratory (Tonn et al., 2011). The survey data was used to describe occupant satisfaction and perceived benefits from the program as well as to assess the energy education provided. The adult in the household most involved with the weatherization of the home or the head of the household was interviewed and answered the survey. Only questions regarding energy education were included in the analysis of this paper. In addition, utility bills were furnished by energy companies and weather-adjusted using Princeton Scorekeeping Method (PRISM©). PRISM uses utility meter readings from pre and post weatherization repairs, together with average daily temperatures for the same periods, to determine a weather-adjusted index of consumption, Normalized Annual Consumption (NAC).

This study captured the subjective perceptions of the homeowners whose houses were weatherized with regards to the weatherization outcome and education provided on energy savings strategies. Out of the 50 households interviewed, 47 agreed to answer the questionnaire, from which 81% (38) said that they received information on ways to save energy in their home from the weatherization agency staff. Results showed a wide range of time spent on homeowner education among different weatherization agents; however most homeowner said 60% (22) that the agents spend from "15 to 30 minutes" discussing energy savings strategies. In addition, results revealed that 81% (30) of homeowners received "One or more brochures, booklets, or manuals" about saving energy and believed that they understood "very well" the agent's discussion about saving energy. 44% expressed that they spent about "15 to 30 minutes" reviewing the educational material after the weatherization visit.

In general, most homeowners (72%) were satisfied with the information about energy savings provided by the WAP agent. Results also showed that energy saving widely ranged among households that received and did not received client education as perceived by the homeowners (Table 1).

Table 1. Energy Savings versus Client Education

Energy Savings (%)

| Did you get any information on ways to save energy in your home from the people who weatherized your home? | N | Min. | Avg. | Max. |
|--|----|------|------|------|
| Yes | 19 | -57 | 9 | 45 |
| No | 3 | -76 | -28 | 18 |

In addition to the descriptive statistics, hypothesis testing was conducted to evaluate if education, education type (e.g. printed material, digital material, demonstration) and homeowners time reviewing energy saving materials had a significant impact on energy savings. Although there was no statistically significant difference on energy savings among homeowners that received energy education (N=19) compared with those that did not (N=3); results revealed a significant difference on the energy savings based on the type of education received by the homeowner ($p=0.089$, $\alpha=0.1$). Those homeowners that client education was based on demonstration had significantly more energy savings (46% on average) than the other types of energy saving materials used. There was no statistically significant difference in the energy savings based on the reviewing time by the homeowners.

Most homeowners were satisfied with the energy savings realized and the energy education received. Based on the perceptions and experiences with regards to client education received, homeowners realized most savings when the client education was performed via demonstration. However, the study team informally observed that many owners adopted more energy consuming lifestyle practices after the weatherization. For example, some set their thermostats cooler (as low as 65 degrees), used the A/C more constantly than before, had more occupants in the home, and few had programmed their new programmable thermostats. This can obviously have a negative impact on energy savings and may be a factor in why energy consumption rose for some households, thus reducing the average energy consumption reduction overall.

The implications of this project relate to the lessons learned and energy education strategies most effective in modifying occupant's behaviors to one that is more energy efficient after weatherization measures. Introducing hands-on and demonstration components in the homeowner education process can improve current energy education practices. For example, physically show and help the homeowner how to set their new programmable thermostat and explain what an optimal temperature for summer and winter would be for their houses based on the weatherization work performed, with "dollar bill" or other visual aids to illustrate the financial prize of those thermostat settings and other energy-saving practices. Similarly, adopting a homeowner education system that requires recipients to attend educational workshops on how to operate and maintain their weatherized homes to save energy.

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THE ASIAN AND PACIFIC ISLANDER MINORITY IN THE UNITED STATES: DEMOGRAPHIC CHARACTERISTICS AND HOUSING CHALLENGES

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Between 2000 and 2010, the Asian population in the United States grew 43% (Hoeffel, Rastogi, Kim, & Shahid, 2012). This visible minority population of over 14 million people tends to be geographically concentrated in the metropolitan western United States (New York City being the notable exception). Among United States minority populations, Asians and Pacific Islanders are often grouped together, including Census data. Asian and Pacific Islanders speak different languages, have different cultures, and lengths of residence in the United States. In general, *Asian* means those with origins in the Far East, Southeast Asia, or the India subcontinent (Reeves & Bennett, 2003). In the 2010 Census, 5% (14.7 million people) of the United States total population belonged to this ethnic category (Hoeffel et al., 2012). *Pacific Islander* refers to those with origins in Hawaii, Guam, Samoa, or other Pacific Islands (Reeves & Bennett, 2003). In 2010, only 520,949 (approximately 0.2%) belonged to this race category (U.S. Census Bureau, 2010a).

This abstract identifies a demographic profile of the Asian minority and Pacific Islander population and presents current housing issues and challenges. This profile then suggests future research needs to address these challenges.

Demographic Profile

Almost half (46%) of Asian and Pacific Islanders live in the western United States, while 20% live in the northeastern United States. This represents a slightly more dispersed population than in 2000 (Hoeffel et al., 2012). The highest concentration of Asians and Pacific Islanders are in metropolitan areas, notably New York City, Los Angeles, and Honolulu (Hoeffel et al., 2012).

Households and Families

Compared to non-Hispanic Whites, Asian and Pacific Islanders are:

- Younger (26% versus 23% under age 18);
- More likely to live in family households (73% versus 66%);
- More likely to have families with five or more members (18% versus 11%);
- Less likely to live in two-person households (28% versus 47%);
- Less likely to live in households with elderly members (7% versus 14% over 65 years of age);
- Less likely to be divorced (5% versus 10%); and
- More likely to be never married (33% versus 25%) (Reeves & Bennett, 2003).

Education, Employment and Income

Compared to non-Hispanic Whites, Asian and Pacific Islanders are:

- More likely to have a bachelor's degree (51% of males and 44% of females versus 32% of males and 27% of females);
- Similarly employed (67% and 66% respectively in the labor force), although Asian and Pacific Islander males (75%) were more likely in the labor force than females (59%);
- Slightly more likely to be poor (10% versus 8%). In Asian and Pacific Islander households with a male householder and no spouse, 31% had income over \$75,000 while 25% had income under \$25,000. In households with a female householder with no spouse, 17% had income over \$75,000 while 32% had income below \$25,000 (Reeves & Bennett, 2003).

Immigration and Citizenship

Some Asians, such as Chinese and Japanese, have been in the United States for several generations, and others, including Hmong, Vietnamese, and Cambodian, have a relatively shorter immigration history. Few Pacific Islanders are foreign-born (Reeves & Bennett, 2003). In 2000, 31% of Asians were United States natives and 69% were foreign born (Reeves & Bennett, 2004). Preliminary 2010 Census data reports 67% of Asians are foreign born and 38% are naturalized citizens (U.S. Census Bureau, 2010b). For Pacific Islanders, 80% were native to the U.S.; 8% were naturalized citizens (Harris & Jones, 2005).

Housing

Asian and Pacific Islanders face significant levels of discrimination when searching for housing in large metropolitan areas. Consistent adverse treatment against Asian and Pacific Island renters is similar to that of African American and Hispanic renters. Likewise, homebuyers experience issues in housing availability, inspection, financing assistance, and agent encouragement, comparable to the discrimination level experienced by African American homebuyers and significantly higher than the discrimination level against Hispanics (Turner, Ross, Bednarz, Herbig, & Lee, 2003).

Asian and Pacific Islander homeownership rates are relatively lower than the total United States population (Harris & Jones, 2005; Reeves & Bennett, 2004). In 2000, 53% of Asian-occupied housing units were owner-occupied housing units while 47% were renter-occupied housing units (compared with 66% of owner-occupied and 34% renter-occupied housing units of the total population) (Reeves & Bennett, 2004).

Homeownership rates of Pacific Islanders were much lower than the total U.S. population. In the 2000 Census, 46% of Pacific Islanders had owner-occupied housing units, compared with 66% of owner-occupied housing units of the total U.S. population. Almost half of native Hawaiian, Guamanian, Tongan, and Fijian householders lived in rental housing units. However, almost 67% of Samoan and 88% of Marshallese households lived in rental units (Harris & Jones, 2005).

Conclusions and Recommendations

Asians, a growing population group has a majority of immigrants and a minority of citizens. Although generally well educated and employed, as a population group, they can face reduced employment and poverty. Asians have reduced access to homeownership and face housing discrimination. The lower homeownership rates of immigrants can be related to typical characteristics including: (a) old-country knowledge and customs, (b) limited ability to understand and speak English, (c) less conventional credit histories, (d) limited success with conventional financing, (e) less opportunity to obtain conventional mortgage products, and (f) difficulties in finding affordable housing (Schoenholtz & Stanton, 2001).

Pacific Islanders, predominately native born, face many of the same housing challenges as Asians. In fact, their homeownership rates are even lower than Asians.

The profile presented in this abstract is limited in that is primarily based on Census data and does not allow investigation of separate cultural groups and the influence of different lengths of immigration. However, this overview does raise important housing issues for future study, such as:

- How does the concentration of the Asian and Pacific Islander population in metropolitan and/or predominately western states contribute to their housing challenges?
- Why do their relatively high levels of education and labor force participation not allow Asian and Pacific Islanders greater access to homeownership?
- What role do cultural and familial factors (such as larger families and more single adults) contribute to housing challenges?
- Does length of time since immigration and naturalization as citizens influence access to, and quality of, housing?

- Do different cultural and ethnic groups, such as Chinese, Korean, Guamanian, or Fijian experience unique housing challenges?

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THE RELATIONSHIP BETWEEN PUBLIC TRANSPORTATION AND PROPERTY VALUES

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Introduction

Public transportation has the ability to both positively and adversely affect property values of single family homes, multi-family rents and commercial land prices, depending on the location of public transportation and the perceived value of mass transit in the surrounding neighborhood. This paper reviews relevant case studies and identifies variables associated with public transportation that contribute to the fluctuation in property values, offering a framework for policy makers, developers and real estate managers.

Public Transportation includes transportation that provides regular and continuing general or special transport to the general public (Association, 2012). Individual Transit can be considered biking and walking, whereas Mass Transit can be considered bus, van, and rail systems. Mass transit systems exist in both large metropolitan areas and smaller cities, providing transportation to individuals at a set cost in order to move them from one location to another. For individuals who have no means of transportation, ie, a personal vehicle, public transportation is a major necessity. Mass transit also offers benefits for individuals who own vehicles but may wish to avoid heavy traffic or reduce their impact on the environment. Many people who live in metropolitan areas seek out a place to live where public transportation is located so they will be able to easily commute around town. In addition to cost savings and ability to avoid traffic congestion, others are also attracted to the commercial and entertainment options that often cluster around transit stations. However, there can also be drawbacks to living near certain forms of transit. Alternatively called "nuisance effects", "negative externalities", and "disamenities", the noise, traffic, and pollution associated with transit systems can cause homes located in close proximity to certain transit lines or stations to have lower values than those slightly farther away because they lower the appeal - and thus the market price - of the neighborhood" (Wardrip, 2011). Safety issues and stereotypes can also alter the perceived value of the transit system and affect the real estate market.

Selected Case Studies

Several case studies were reviewed across the United States to highlight both the positive and negative effects that transit systems have on surrounding property values. The Atlanta Beltline is a redevelopment project located in downtown Atlanta, Georgia providing light rail transit, trails, parks, economic development, affordable development and affordable workforce housing. Immergluck (2009) found that between 2002 and 2005, as project plans began to take shape and media attention increased, single-family homes within one-quarter mile of the planned loop, in the southern portion, sold at a 15 to 30 percent premium compared to similar properties located more than two miles away before falling off (Wardrip, 2011). In this case, the mere mention of a proposed project that supported transit around a predetermined loop increased property values before the project even broke ground.

The Bay Area Rapid Transit (BART), located in San Francisco Bay, California, is a network of regional heavy rail transportation. The heavy rail service includes 104 miles of track, 44 stations, and serves 8 major cities through its network. A recent study examining potential housing near the area found rental units near BART had higher rents, suggesting that individuals were willing to pay higher prices for the convenience of living near the transit system (Diaz, 1999). The Portland Transit System, TriMet, services the metro area of Portland, Oregon, running between 8 different cities and providing transit services in the form of bus, light rail and commuter rail service to all commuters. Knaap, Ding, and Hopkins (2001) found that, compared to other vacant residential parcels, vacant parcels within one-half mile of the planned Westside extension line sold at a 31 percent premium in the two years after plans for the line were announced, and the premium for parcels within one mile was 10 percent. Again, the mere speculation of a transit system expanding into newer territory drove up cost in that area (Wardrip, 2011).

The Amtrak Hiawatha line runs from Milwaukee, Wisconsin to Chicago, Illinois with 14 trips daily and 500 connection destinations along the route. "In a study of the Hiawatha Line that opened in Minneapolis in 2004, just to the west of an existing highway industrial corridor, researchers found a nuisance effect associated with these pre-existing lands usages that depressed property values before the line was added. After construction, the nuisance effect persisted, but the authors found a net increase in the value of single-family and multifamily homes west of the line as a result of the improved accessibility. The premium for multifamily properties was \$15,755 after the line opened, representing 10 percent of the average sales price. In this situation, a pre-existing nuisance negatively affected property values in that area, but after the transit line was installed, the ease of accessibility to the rail line offset this nuisance, resulting in a 10% gain in property value (Wardrip, 2011).

Summary and Implications

As the case studies demonstrate, mass transit can have a positive impact on property value. However, transit systems can also be perceived as a nuisance instead of an added value. Such is the case with the MARTA system located in Atlanta, Georgia. The MARTA Transit System was established in 1971 and consists of Heavy Rail, Bus, and Mobility services and currently services the metro Atlanta area. For years following the opening of the MARTA metro-rail system in Atlanta, land near MARTA stations failed to appreciate significantly in value and dense development failed to occur. In fact, throughout much of the 1980s and early 1990s, the MARTA experience was frequently cited as "proof" that urban development would not respond to public transit investments.

While public transportation continues to be debated, policy makers, developers and real estate managers can use effective strategies to promote public transportation. These strategies include improving accessibility, promoting positive public perception, collaborating with joint venture partners, assemblage of land parcels to promote higher connectivity, and increased usage of public transportation as a way to enhance smart growth and combat sprawl.

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FACTORS AFFECTING MOVEMENT ALONG THE HOUSING CAREER

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Introduction

This study examines the factors affecting movement along the housing career among low-and moderate income groups. Americans move frequently, and most of these moves are considered to improve the household's utility and quality of the house (Morrow-Jones & Wenning, 2005). It is widely known that low income households tend to move more frequently than moderate income households and usually in a downward direction (Bartlett, 1997; Cook, Crull, Fletcher, Hinnant-Bernard, & Peterson, 2002; Goetz, Skobba, & Yuen, 2011). Throughout a person's life, there will be multiple moves typically from living with one's parents to renting a first apartment to finally owning a home. These moves create what researchers call the housing career.

For this study, an upward movement along the housing career will contain any move where the household perceived its current housing unit and neighborhood better than its previous unit and neighborhood. A downward move would be if the household perceived its housing unit and neighborhood to be worse than its previous situation. Meanwhile, a lateral move along the housing career would be if the household perceived its housing unit and neighborhood to be the same as its previous unit and neighborhood. The researchers will determine whether there is a difference in factors affecting the likelihood of upward, downward and lateral moves along the housing career between low-and moderate-income households.

Methodology

By using the American Housing Survey (AHS) data from 2009, a nationally representative data set, the researcher is able to analyze a large sample of low and moderate income households and compare the reasons for moving. Movement along the housing career path will be measured by the relative quality of the housing unit to which a household moved. Quality of the housing unit is how the household perceives its current living situation compared to previous residential situation, which is how the dependent variable (housing career) is measured. A low income household is defined as 50% of the area median income or lower and a moderate income household is defined as 51% to 80% of the area median income, consistent with previous research (Mandelker, 2012). It is expected that lower income households move for reasons different from those of their moderate income counterparts. There is a gap in the literature regarding moderate-income households and the housing career. Given the importance of stable housing situations in increasing household outcomes in other areas of life like stabilizing the households' jobs (Bartlett, 1997), developing an understanding of the factors that drive mobility decisions are important in informing policy to help households progress upward along the housing career, rather than downward. This study will attempt to answer the question of what factors are causing low-income people to move and it differs from moderate-income people. From this analysis, the researcher will identify the factors into categories that either lead to housing progression or regression. This issue holds a higher magnitude of importance today, when considering the steadily declining state of the housing market. From the descriptive statistics in Table 1, the average age of recent movers is 38 years old compared to 50 years old for the full sample. This was not surprising, given that younger people were more likely to move. It was also not surprising that 40% of the recent movers were college educated. Previous research stated that more educated people are more likely to move (Shumaker & Stokols, 1982).

Initial Results

Logistic regressions were performed for the odds of an upward or downward movement along the housing career. The dependent variable is movement along the housing career, or whether there was an upward or downward movement. The main independent variables were the reasons for moving. Table 2

presents the results of the logistic model for both low-and moderate-income groups. Only two variables were significant for both low- and moderate- income groups, which were changes in marital status and financial reasons.

After preliminary analysis, the reasons for moving do differ among low-and moderate-income groups. For moderate-income households, age, having a less than high school education level, change in marital status, family reasons, cheaper rent, and financial reasons were all significant. For low-income households, forming a household, eviction, financial reasons, and job opportunities were significant.

Conclusion

This research is a preliminary analysis. Further research needs to be conducted in order to assess the results of the study. This could be done by conducting an exploratory factor analysis that would potentially help better understand the differences between the low-and moderate-income groups.

Further research also needs to examine race more in depth and maybe use different categories instead of white, black and other races. Tenure was not significant in either model, which was surprising since one would think that renters would be more likely to have a downward movement, but this was not the case in this study. Education level was only significant in the moderate-income model, which confirms past research that education is a predictor of positive movement along the housing career (Shumaker & Stokols, 1982).

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Table 1
Descriptive Statistics

| Variable | Full Sample (N=45,057) | Recent Movers (N=10,472) | Non-Movers (N=34,585) |
|---|---------------------------|-----------------------------|--------------------------|
| Dependent variable (%) | | | |
| Upward | 56.16 | 56.96 | 50.67 |
| Same | 16.71 | 17.19 | 17.71 |
| Downward | 27.13 | 25.85 | 31.62 |
| Demographic & Economic | | | |
| Age | 49.70 (0.03) | 37.92 (0.06) | 53.37 (0.03) |
| Male (%) | 54.51 | 50.03 | 55.69 |
| White (%) | 69.96 | 76.12 | 83.25 |
| Black (%) | 10.66 | 16.40 | 11.28 |
| Other races (%) | 19.37 | 7.48 | 5.46 |
| Less than high school (%) | 11.52 | 12.00 | 13.86 |
| High school (%) | 23.54 | 26.78 | 27.67 |
| Some College (%) | 15.02 | 20.84 | 16.55 |
| College (%) | 49.92 | 40.37 | 41.92 |
| Homeowner (%) | 59.23 | 32.09 | 79.97 |
| Renter (%) | 25.14 | 66.16 | 18.54 |
| Low income households (%) | 29.66 | 42.49 | 32.30 |
| Moderate income households (%) | 16.04 | 20.29 | 18.25 |
| High income households (%) | 5.43 | 37.22 | 49.45 |
| Reasons for moving (%) | | | |
| All reasons of equal importance | | 3.96 | |
| Private company or person wanted to use it | | 0.64 | |
| Forced to leave by the government | | 0.27 | |
| Disaster loss (fire, flood, etc.) | | 0.73 | |
| New job or job transfer | | 9.88 | |
| To be closer to work/school/other | | 9.47 | |
| Other, financial/employment related | | 3.57 | |
| To establish own household | | 11.94 | |
| Needed a larger house or apartment | | 9.68 | |
| Married, widowed, divorced, or separated | | 5.65 | |
| Other, family/personal related | | 8.01 | |
| Wanted a better quality house (apartment) | | 7.78 | |
| Change from owner to renter OR renter to owner | | 5.33 | |
| Wanted lower rent or less expensive house to maintain | | 5.51 | |
| Other housing related reasons | | 4.93 | |

| | | | |
|---------|--|-------|--|
| Evicted | | 0.62 | |
| Other | | 12.03 | |

Table 2
Logistic Models: Low-and Moderate-Income

| Variable | Low-income N= 2,054 | | Moderate-income N= 4,493 | |
|-----------------------------------|------------------------|------------|-----------------------------|------------|
| | Coefficient (SE) | Odds Ratio | Coefficient (SE) | Odds Ratio |
| Demographic & Economic | | | | |
| Age | -.001(.006) | .999 | -.015*** (.003) | .986 |
| Male | .245(.144) | 1.278 | -.157** (.092) | .855 |
| Black | .149(.202) | 1.160 | .058(.107) | 1.060 |
| Other races | -.603(.341) | .547 | -.093(.181) | .911 |
| Less than high school | -.488(.282) | .614 | -.428** (.144) | .652 |
| High school | -.130(.178) | .878 | -.110 (.117) | .896 |
| Some college | -.103(.187) | .903 | .092(.124) | 1.097 |
| Homeowner | -.236(.179) | .789 | -.296 (.150) | .744 |
| Reasons for moving | | | | |
| Moved to form own household | .579*(.222) | 1.785 | .272 (.139) | 1.313 |
| Move larger unit | -.230(.266) | .794 | -.331 (.188) | .718 |
| Move change in marital status | .826**(.252) | 2.283 | .607*** (.171) | 1.834 |
| Move-other family reason | .210(.259) | 1.233 | .529*** (.141) | 1.697 |
| Move cheaper rent | .468(.258) | 1.597 | .594*** (.152) | 1.811 |
| Move housing reason | .419(.273) | 1.521 | -.032 (.194) | .969 |
| Move evicted | 1.472*(.566) | 4.358 | .783 (.334) | 2.189 |
| Move other reason | .040(.247) | 1.041 | .155 (.143) | 1.168 |
| Move other financial reason | .979*** (.273) | 2.662 | .697*** (.172) | 2.007 |
| Move forced by government | -.193(.814) | .824 | .105 (.491) | 1.110 |
| Move jobs | .576(.234) | 1.78 | -.028 (.211) | .973 |
| Move closer to work/school | .405(.223) | 1.500 | .316 (.150) | 1.371 |
| Move private company wanted unit | -1.232(.738) | .292 | .333 (.260) | 1.395 |
| Intercept | -2.331 *** (.281) | 1.278 | -1.358 *** (.173) | .257 |
| Log Likelihood | -692.86607 | | -1714.8971 | |
| Pseudo R ² | .038 | | .034 | |

Note. *** p-value<.001, **p-value<.005, *p-value<.01

THE ROLE OF HOUSING COUNSELORS IN HECM FRAUD DETECTION

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Overview

This study explores the growth of Home Equity Conversion Mortgage (HECM) fraud and the role of housing counselors in its identification. Fraudulent schemes, as perpetrated on the two most common types of HECMs, are identified and illustrated. The role of housing counselors in identifying and curbing fraudulent activity are explored through an open-ended survey of counseling agencies. The purpose of the survey is two-fold: to understand the complexities involved in HECM counseling and to determine if counselors are cognizant of and trained to identify HECM fraud. Preliminary data were collected from 8 of the 9 HECM certified counseling agencies in the state of Georgia. The survey is currently being redesigned and will be distributed nationwide.

Mortgage Fraud

There is a growing body of literature on mortgage fraud centered around fraud perpetrated during the primary mortgage loan origination phase. This fraud flourished during the boom years of the real estate market as soaring home values provided ample opportunities (Friedrichs, 2009; Katz, 2009). As economic conditions changed, fraudsters moved into the HECM market (McKenzie, 2011). Two factors aided this shift: a vastly increased volume of HECMs and the recognition of seniors as an easily targeted population for victimization of financial crimes (Deem, 2000; Nerenberg, 2000).

The Role of Housing Counselors

The housing counseling industry has its origins in the 1960s, based on the premise that consumers should be well-informed in their housing decisions. Most housing counseling agencies provide an array of housing counseling services, generally focused on pre-purchase homeownership counseling and delinquency and default counseling. However, housing counselors have become critical in the HECM loan process, as applicants are required to receive counseling from a HUD-approved counselor. Overall, HECMs present a unique challenge to housing counselors. A combination of increased complexity, counselor qualification standards, and follow through requirements serve to increase the difficulty of providing quality housing advice. McKenzie (2011) cautions that reverse mortgage products require even more vigilance than forward mortgages on the part of industry. However, despite these challenges, housing counselors have a unique opportunity to identify and thwart fraudulent activities.

Methods and Results from a Counselor Survey on Reverse Mortgages

An open-ended survey was distributed online to all HECM certified housing counseling agencies in a large state. The purpose of this survey was two-fold: to understand the complexities involved in HECM counseling and to determine if counselors are cognizant of and trained to identify HECM fraud.

HECM Counseling

A series of questions was utilized to differentiate how HECM counseling sessions differed from more traditional housing counseling. The questionnaire was sent in Spring 2012 to state housing counselors who are HUD-qualified to counsel clients about HECM products. The survey was delivered online through Survey Monkey.

Results indicated that counseling agencies often required HECM clients to attend additional sessions as compared with traditional counseling clients. HECM counseling sessions were found to range from brief half hour sessions to longer 2 hour meetings.

Somewhat surprisingly given the complexities involved within a HECM, four of the counselors indicated that clients had a general understanding of the product prior to their first meeting. This was attributed in large part to the availability of information on the internet. Additionally, two respondents stated that agency protocol required distribution of National Council on Aging materials on reverse mortgages to ensure at least a basic understanding before the counseling session even took place.

In perhaps one of the most cautionary responses, a housing counselor stated that "Most of them [the clients] do [understand], while others do not because they were told by their family members that they need to do this". A response of this nature may indicate that other family members are seeking the best retirement funding option for their parents or grandparents. It is also a possible indication of loss of control of the senior principal involved. This is of significant concern, given that family members of fraud victims have often been involved in the fraud itself.

Information was also gathered as to the reason clients were seeking a reverse mortgage. Nearly all respondents indicated the most common motivating factor driving a senior to utilize a HECM was an inability to meet daily living expenses. In addition, two respondents stated that seeking funding for home repairs was a strong motivating factor.

HECM Fraud

Three of the survey questions dealt directly with the issue of fraud as it relates to HECM products. Counselors provided a variety of responses indicating a vulnerability among the clientele, but they also revealed a lack of general understanding of fraud as it pertained to HECMs. When asked whether housing counselors were trained to recognize mortgage fraud as it related to HECMs, responses *failed to* convey an even basic understanding of fraud as presented through the course of this paper.

Agencies were also asked if their clients had experienced any fraud involving HECMs, and whether they had seen a trend forming regarding these fraud occurrences. Three of the respondents stated that they had not seen nor heard of any HECM fraud that had occurred involving their clients. One stated flatly "yes" without providing further explanations or elaborations

Conclusions

Whereas HUD certification procedures requires the agency to provide a vigilance toward fraud-like activity among the HECM product, it is not at all clear that a consistent protocol is set in place as to how such fraudulent situations should be addressed. It appears that counselors have avoided addressing the subject head on, either from a lack of understanding or clear protocol. Survey responses indicate that additional education and training is necessary for housing counselors to do their job effectively.

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HEALTHY HOMES PROGRAMS FOR CHILDCARE WORKERS AND HOUSING AUTHORITY RESIDENTS

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Resource Programs and Partners

Most people spend at least half of their lives inside their homes, even more for our most vulnerable family members—infants, elderly or disabled. That is why professionals concerned with housing, health, child development, aging, and parenting are interested in creating healthy home environments.

Professionals know that simple choices and small changes in homes and childcare centers can have a great impact on the health and well-being children and residents. They also know that some health problems related to housing conditions, such as asthma, disproportionately affect minority children and those living in poverty. Getting this simple information to those who need it most is the challenge!

Extension housing educators have been on the front lines providing information about healthy home environments and indoor air for many years through the Healthy Homes Partnership (HHP), funded by HUD's Office of Healthy Homes and Lead Hazard Control. The HHP disseminates *Help Yourself to a Healthy Home* booklets in several languages. In recent years, the partnership's network of Extension educators has also partnered with other national organizations with similar goals, including the National Center for Healthy Housing (NCHH), and the Children's Environmental Health Network (CEHN). Both of these organizations are concerned with finding ways to reach those who can affect children's environments at home or in childcare settings, particularly in low-income or at-risk populations. Recognizing Extension's unique capacity for outreach, their challenge is to get their technical information to field Extension agents in a format that can meet the needs of local clientele.

The NCHH's *Essentials for Healthy Homes Practitioner's Course* is a comprehensive research-based program which includes statistics from the latest American Housing Surveys, property maintenance codes, and Institute of Medicine Reports. The two-day course gives a holistic view of healthy homes for its target audience—health and housing professionals, featuring seven principles for a healthy home: Keep it Dry, Keep it Clean, Keep it Pest-Free, Keep it Maintained, Keep it Ventilated, Keep it Contaminant-Free, and Keep it Safe.

Although NCHH's *Essentials* course is built around basic principles that everyone should understand, the level and length of the program make it unsuitable for less educated audiences, or those who do not require that level of technical education. The seven principles or tips for a healthy home, therefore, were adapted and merged with Extension's *Help Yourself to a Healthy Home* information to create four basic workshops suitable for presentation by Extension field agents to childcare workers and parents.

NCHH's National Healthy Homes Training Center also sponsors a successful technical workshop, *Integrated Pest Management (IPM)*, for multi-family housing professionals, such as managers, pest control companies, and property owners. This one-day program may also be somewhat too long

and technical for childcare provider audiences who have generally been teaching children all day before attending evening workshops. Therefore, a new two-hour workshop based on this program was designed to meet the needs of childcare workers or other Extension audiences.

Eco-Healthy Child Care[®] (EHCC) is a national program that partners with child care professionals to eliminate or reduce environmental health hazards found in child care facilities. EHCC supports child care providers as they make simple choices that benefit the health and well-being of children in their care. The program offers training, technical assistance, resources, marketing, and an endorsement. By reducing exposure to toxics, the program creates healthier environments. EHCC presentations and materials, made available to Extension agents and others for training in their local areas, and designed for childcare worker audiences, were used for one session in the new Healthy Homes series for child care providers.

New Healthy Homes Workshops

Technical programs described above were adapted by Mississippi State University Extension service educators and partners to create four new workshops fulfilling two pressing needs. First, there was a great demand for training for childcare workers since contact hours are required for licensure. Second, professional state agency partners in the health arena were looking for ways move from specific programming, such as lead or asthma, to build capacity for a more holistic healthy homes approach.

Designed for Extension field agents to be able to “grab and go,” the workshops have been used successfully with diverse audiences, including childcare providers, residents of public housing, and homeowners. The two-hour workshops were created and approved by childcare licensure officials to meet criteria for required education hours for childcare workers and to fit within the customary time frame for training, 6:15 to 8:15 p.m. Several experiential learning activities were included in each session to keep tired childcare workers engaged.

Child Care Providers: Series of Two-Hour Workshops

All seven principles or tips for a healthy home are included in the new workshop series, however, only a few are emphasized in each of the four sessions:

- **Principles of a Healthy Home** emphasizes relationships of health and housing, as well as, the house as a system, adapting the NCHH *Essentials* course.
- **Indoor Air, Mold, and Disaster Clean-up** emphasizes ventilation and moisture using *Help Yourself to a Healthy Home* booklets and the EPA’s Flood Clean-up booklets.
- **Integrated Pest Management** emphasizes controlling pests and cleaning with videos created for this project featuring Extension Entomology and Housing Specialists (available online).
- **Eco-Healthy Childcare** emphasizes contaminants and safety using ECHH resources, including these fact sheets: *Pesticides and Pest Prevention, Air Quality, Household Chemicals, Lead, Mercury, Radon, Art Supplies, Furniture and Carpets, Plastics and Plastic Toys, Treated Playground Equipment, Recycling and Garbage Storage, Education and Awareness.*

Residents of Public Housing: Selected portions of these four healthy homes workshops are combined to make one program for residents of public housing, excluding Eco-Healthy Childcare.

Extension Educator Toolbox: Another series of workshops or lessons all included in one toolbox is being produced by Montana State University Extension in partnership with volunteer Extension

educators from other states. Based on concepts included in *Help Yourself to a Healthy Home*, each lesson includes learning activities, along with teaching plans and presentations to make for easy replication by field Extension educators.

Resources/websites:

<http://www.healthyhomespartnership.net> (Help Yourself to a Healthy Home and states' resources)
<http://msucare.com/frm/housing.html> (Mississippi State University Extension IPM video lessons)
<http://www.msuextensionhousing.org/> (Montana State University Housing & Environmental Health)
http://www.epa.gov/iaq/flood/flood_booklet_en.pdf (Disaster, moisture, flood clean-up)
<http://www.ecohealthychildcare.org/> (Fact sheets and childcare center resources)
<http://www.nchh.org/Training/HealthyHomesTrainingCenter/TrainingCourses/Essentials.aspx> (Essentials)
<http://www.nchh.org/Training/IntegratedPestManagement.aspx> (IPM in Multi-family housing)

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MOVING INTO HOMEOWNERSHIP: COMMUNITY LAND TRUST HOMEOWNERS' PERCEPTIONS OF PAST AND PRESENT HOUSING

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Community land trusts (CLTs) are a form of shared-equity homeownership that use two means to ensure homes remain affordable. First, the CLT organization retains ownership of the land; the homeowner owns the house. This dual ownership provides the ability to stabilize land costs and keep homes affordable. Second, community land trusts retain a portion of the home's equity at resale, allowing homeowners to build some equity while giving future homeowners access to ownership at an affordable price. The unique nature of the community land trust model has led to a research emphasis on the ability of CLT organizations to maintain affordability over time and CLT homeowners' ability to move (Davis, 2006; Tempkin, Theodos & Price, 2010). However, the focus on the structural aspects of the CLT model may overlook other important benefits, particularly those of the low- and moderate-income households who purchase CLT homes. Previous research on low- and moderate-income homeowners suggests that they are more likely than renters to be satisfied with their housing and neighborhoods and live in their homes longer (Grinstein-Weiss, Yeo, Anacker, VanZandt, Freeze & Quercia, 2011; Rohe, VanZandt and McCarthy, 2001). Furthermore, the ongoing relationship with the CLT organization may enhance the experience of homeowners and increase their chance of long-term success (Gray, 2008).

Previous research suggests that the model offers an affordable alternative to homeownership and that, despite relatively low income levels, CLT homeowners have very low rates of foreclosure (Tempkin, Theodos & Price, 2010). The CLT movement, which has roots in the social justice and Southern civil rights movements, has grown rapidly over the past 30 years. There were no CLT organizations before 1970; today there are 259 in the United States (Davis, Jacobus & Hickey, 2008). As more communities look to CLTs as a community development strategy, further research is needed to understand the ways in which CLT homeownership benefits families.

The purpose of this research is to explore the perception of housing and neighborhood quality and presence of social capital among CLT homeowners living in Athens, Georgia. The study used a mixed-method approach that included collection of data on participants' housing and life circumstances in the five years prior to becoming CLT homeowners, the administration of a 47-item household survey comparing past and present housing on a range of topics and a series of open-ended, qualitative questions about their housing and experiences as CLT homeowners. Data was collected during a single interview, which took about one hour and was recorded with the participant's permission. The goal of this research was to inform local government policymakers and non-profit community developers, who are increasingly looking at the CLT model as a source of permanent affordable housing.

Overall 14 of the 20 Athens Land Trust homeowners participated in the study. The sample included 11 female and three male participants. Twelve of the participants were African American and two were Caucasian. The median family size was 2.5; about half of the households had minor children. The average age of the homeowners interviewed was slightly over 50 years. The majority of the households in the study earned less than \$30,000 a year. All of the participants had lived in Athens, Georgia prior to purchasing their homes.

The findings from the survey results suggest that CLT homeownership has allowed the participants to live in larger homes that have adequate space to meet household needs. About two-thirds of the homeowners indicated that their CLT home had needed repairs since they moved in and a little less than a quarter (3 participants) indicated that their CLT home needed the same or more repairs than their previous home. All participants indicated that they were satisfied with the overall quality of their home and all but one participant felt that the quality of their CLT home was better than that of their previous home.

The study findings also suggest that the CLT homeowners are satisfied with their neighborhoods. All indicated that they felt safe in their neighborhood. The majority felt that their neighborhood offered

good community activities and that they had convenient access to health care and grocery stores. While the majority of CLT homeowners (12) indicated that they were happy with the quality of their neighborhood, about half of the homeowners indicated that they did not have many friends in the neighborhood. This is a particularly interesting finding given that many homeowners purchased homes in or near neighborhoods they had lived in for years. Several participants noted that they had watched the neighborhoods change over time as students or new ethnic groups moved in or the neighborhood transitioned from higher-crime to lower-crime areas.

Overall the findings of this study suggest that Athens Land Trust homeowners are satisfied with the homes and neighborhoods. The qualitative data also suggests that the support received from Athens Land Trust was instrumental in helping the participants achieve homeownership. Future research with larger sample sizes and including homeowners from CLT organizations in varying geographic settings would advance our understanding of the household level outcomes of CLT homeownership.

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ASSESSING HOME ENERGY USE BY LOW-INCOME CONSUMERS BEFORE AND AFTER WEATHERIZATION

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Introduction

The Weatherization Assistance Program (WAP) is a national program administered through the U.S. Department of Energy (DOE). Founded in 1976, WAP is the oldest and largest energy efficiency program in the country, and one of the few government programs that saves more money than it costs. DOE estimates that WAP has benefited over 6.4 million low-income families over the past 33 years, reducing their annual energy bills by an average of \$437 (U.S. Department of Energy, 2012).

The goal of the WAP is to provide cost-free energy upgrades to low-income households with a preference given to the elderly, people with disabilities, and families with children. An average spending limit is set at \$6,500 per home and, due to the cost effectiveness of the energy upgrades installed, the energy savings usually pay for program costs within a few years (U.S. Department of Energy, 2009). Most programs use a Whole House Weatherization approach, which treats the house as a single energy-consuming system. The energy efficiency measures used include air sealing in attics, duct work, and inspection of major combustion appliances.

In Georgia, the WAP is administered through the Georgia Environmental Finance Authority (GEFA). In 2011, the State of Georgia weatherized 2,467 homes, serving 3,618 clients. During FY2012 the Georgia WAP weatherized its 10,000th home, for a cumulative savings of \$305,000 million BTUs of energy (Georgia Environmental Finance Authority, 2012).

Objectives

The objective of this study is to assess the impact of the weatherization program on the low-income households in Georgia. Specifically, the evaluation portion of the study examines how much householders learn about weatherization; how it impacts their daily routines and habits; changes in their energy use before and after weatherization; and the cost-savings associated with the program.

Methodology and Data

The University of Georgia Cooperative Extension (UGA) received American Recovery and Reinvestment Act (ARRA) funding from GEFA to monitor the weatherization activities of community action agencies and to provide client education. Extension Educators conducted an average of four educational workshops each month. The workshops targeted low-income audiences. The focus was on increasing awareness in the community about weatherization – what it is and how to qualify. Educators also provided workshops on ways to save energy and water; avoiding hypothermia and hyperthermia; protecting yourself from carbon monoxide; and cleaning the coils of your refrigerator.

Participants for the study were identified through weatherization workshops (self-identified interest), and referrals from local community weatherization agencies. Over the course of a year, data were collected from individuals who (1) participated in a weatherization workshop and/or (2) received weatherization of their home through the grant. Study participants worked with an Extension Educator to document the use and cost of utilities for three to six months prior to weatherization (as available by each participant) and for six months after weatherization. They gave educators copies of their water and

energy bills. When bills were not available the participants were asked to obtain copies from their utility providers.

Data analysis involved quantitative statistical analysis of the data to determine if the average usage and costs of utilities declined after weatherization. A supplemental survey of 110 households was conducted to inquire if participation in the weatherization project resulted in any behavioral changes in the way households approach energy use and conservation.

Results and Discussion

A total of 395 households were surveyed. Of the households surveyed, 235 contained billing data on the starting and ending dates for weatherization. The latter is important because it serves as the baseline point for calculating the pre- and post-changes in consumer behavior and utility use. Out of the 235 households, 80 had pre- and post-bills for the same months allowing the researchers to take into consideration seasonality when estimating usage changes. Given the short time period and limited number of observations the data were not weather-normalized. Data analysis suggests that 28 out of 80 responses showed increase in the electricity use by 34% on average (max=205%; min=0%, sd=0.43) and 52 out of 80 responses showed decline in electricity use by 25% on average (max=0, min= - 70%, sd=0.18). It should be noted that the unexpected hikes in usage may be due to the installation or repair of an HVAC system in place of a non-working HVAC system. Similarly, an unexpected decline may be due to replacement of electricity consuming appliances with non-electric ones.

Results from the supplemental survey suggest that 36.4% of the households no longer use kerosene or electric heaters as a result of weatherization; about a quarter (24.5%) have developed a habit of closing vents in rooms not in use; and about 31% now clean the refrigerator coils. Over one-third (35.5%) of the households surveyed adjust the thermostat down during the heating months and even more (40%) turn the thermostat up in the cooling months. By changing the thermostat for a period of at least eight hours, households can save up to one percent for each degree change in the thermostat (U.S. Department of Energy, 2011). The vast majority of respondents indicated that they feel more comfortable (80%) in their homes, and virtually everyone (99%) would recommend weatherization program to others.

This study provides state specific examples of post-weatherization energy use and behavior changes that have implications for weatherization studies in other states and nationwide. Further studies need to be done to gain further insights into long-term behavioral changes.

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THE LONG ROAD TO EQUITY: LOOKING FOR SUCCESS IN ADVOCATING FOR CONSTRUCTION TRADESWOMEN

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While women are nearly half the U.S. workforce, they represent less than 3% of workers in the construction trades (USDOL, 2010). Barriers to women working construction are well documented and include difficulty getting hired to experiencing gender and sexual harassment on the job (Eisenberg, 1998, Latour, 2008, & Moccio, 2009).

Problem Statement and Research Design

One support mechanism for women interested in construction has been tradeswomen advocacy and training organizations. However, these groups run on small budgets and often have limited resources for programming. While able to conduct research on their own programs (for example see, Bluemle, 2008), they generally lack resources to conduct national comprehensive studies of effective advocacy. Hence, using research methodology from econometrics, this study compared geographic areas: those served by tradeswomen advocacy/training organizations vs. areas without organizations. The results should be a building block informing the small but existing body of applied research of methods to increase the number of women working construction.

Method

Ten tradeswomen organizations run as 501(c)(3)s have been identified. A direct effect of the work of these organizations was not examined, i.e. tradeswomen were not asked if they have been influenced to work construction because of contact with a tradeswomen organization. Rather, examined, was simply whether having a tradeswomen advocacy and training organization in an area would indicate a higher percentage of women working in the building trades. The hypothesis is as follows:

HO: There is no difference in the number of women working in the building trades between areas with 501(c)(3) tradeswomen advocacy and training organizations versus areas without non-profit tradeswomen organizations.

HA: A higher percentage of women work in the building trades in locations with 501(c)(3) tradeswomen training and advocacy organizations versus areas without these organizations.

Current Population Survey (CPS) Merged Outgoing Rotation Groups as presented by The National Bureau of Economic Research were used. The CPS is the monthly household survey conducted by the Bureau of Labor Statistics to measure labor force participation and employment (NBER, 2011). CPS Merged Outgoing Rotation Groups contain about 60,000 participants. In order to get a larger sample size, the three most recent years' data (2009-2011) were analyzed as well as three years leading into the recent economic downturn (2005-2007).

Metropolitan Area (CBSA) Codes were used to define areas with and without tradeswomen organizations. Metro areas without tradeswomen organizations were chosen on the basis that, first, they had not had a non-profit tradeswomen organization in the past (i.e. Minneapolis and Boston were left out because they had 501(c)(3) tradeswomen organizations that are either defunct or have changed missions). Second, the metro areas were located at a distance far enough from a metro area with an organization that organizations would not be drawing participants or distributing information etc. Finally, because existing organizations are in a number of the nation's largest cities (see Table 2 for tradeswomen organization cities), after meeting the first two criteria, non-tradeswomen organization metro areas were chosen in as large a metro area as possible in order to have comparable data size sets. Even

so, the group without tradeswomen organizations was given one more area but was still, population wise, smaller (see Table 3 for a list of non-tradeswomen metro areas).

Results

Participants who worked construction were identified by the industry code of 770. Areas with organizations were combined for the initial analysis as were those without organizations. Analysis using frequencies showed little difference between groups in the percentages of women working construction (see Table 1). Next, frequencies of women working construction in the 21 chosen Metropolitan Areas were examined individually in 2005 and 2010 (years before and after the recession). This was done to see if there were any outlier cities. Outliers did not appear (see Tables 2 and 3).

Third, as all six data sets contained similar numbers and percentages, the middle year of 2009 was chosen for further analysis. Grouping together areas with organizations and without, a scatterplot, correlation, and logit regression were used with gender as the dependent variable. Virtually no difference could be found between the two groups.

Finally, an analysis was done on the occupations of women who worked in the construction industry (as opposed to looking simply at the industry code). Women in the two groups had the highest representations in the exact same 6 occupations and only two, construction manager and construction laborer, are considered non-traditional occupations (see Table 4).

Conclusions and Implications

With the above findings, no more analysis was deemed necessary in concluding the null hypothesis appears supported.

For those who advocate on behalf of tradeswomen, the results are likely disheartening. The lure of interesting work and high-pay without having to acquire a college degree is what attracts women to the building trades; it's what has been touted by women's employment advocacy organizations as a way for women to earn livable wages and find a path out of poverty. Yet, there is a documented persistent nationwide policy of hiring extremely few women for trades work and often making their lives difficult once they are on site.

Beyond discrimination within construction, there also seems to be a pervasive cultural idea around what jobs women should be doing. In telling people about this research, one question repeatedly asked is, "But, *do* women want to work construction?" The short answer is, of course, yes, there are many women who want to be construction workers. However, the question, "But, *do* women want to be teachers?" isn't one people seem to be asking. Further—positively—not being asked is, "But, *do* women want to be medical doctors?" even though that, until recently, was a male dominated field. We, as a society, need to get beyond the idea that women wanting to work construction are a rare, and, possibly, unwomanly find. Hence, what no tradeswomen advocate is likely surprised by is how large a task remains to achieve equity.

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Table 1
Initial Data Analysis

| Years Analyzed | 2005 | 2006 | 2007 | 2009 | 2010 | 2011 |
|--|------|------|------|------|------|------|
| % Women Construction Workers in 10 areas with Tradeswomen Organizations | 10.2 | 10.0 | 10.7 | 9.9 | 10.3 | 9.7 |
| % Women Construction Workers in 11 areas WITHOUT Organizations | 11.4 | 10.4 | 10.0 | 10.1 | 9.3 | 11.3 |
| % Women Construction Workers in Data Set (vs. men who work construction) | 10.2 | 10.3 | 10.3 | 9.9 | 9.2 | 9.3 |
| % Women Participants in Data Set | 52.3 | 52.2 | 52.3 | 52.1 | 52.2 | 52.2 |

Table 2
Individual Metro Areas with Tradeswomen Advocacy Organizations

| Tradeswomen Advocacy & Training Organization | % women in 2005 | % women in 2010 | Metropolitan Area (CBSA) Codes |
|---|-----------------|-----------------|--------------------------------|
| Brentwood, MO: Missouri Women in Trades | 12.7 | 7.7 | 41180 |
| Chicago, IL: Chicago Women in Trades | 11 | 9.7 | 16980 |
| Cleveland, OH: Hard-Hatted Women | 5 | 17.4 | 17460 |
| Los Angeles, CA: Women in Non-Traditional Employment Roles Inc. | 8.9 | 10.7 | 31100 |
| New York, NY: Non-Traditional Employment for Women | 8 | 8.8 | 35620 |
| Oakland, CA: Tradeswomen, Inc. | 12 | 12.1 | 41860 |
| Portland, OR: Oregon Tradeswomen, Inc. | 13.3 | 10.6 | 38900 |
| Seattle, WA: Washington Women in Trades | 7.4 | 7.6 | 42660 |
| Washington, DC: Wider Opportunities for Women | 12.1 | 10.3 | 47900 |
| Winooski, VT: Vermont Works for Women | 11.7 | 8 | 72400 |

Table 3
Individual Metro Areas without Tradeswomen Advocacy Organizations

| No Tradeswomen Organization | % women in 2005 | % women in 2010 | Metropolitan Area (CBSA) Codes |
|-----------------------------|-----------------|-----------------|--------------------------------|
| Albany, NY | 6.7 | 7.1 | 10580 |
| Boise, ID | 13.5 | 9.5 | 14260 |
| Dayton, OH | 15.6 | 10 | 19380 |
| Houston, TX | 10.8 | 9.1 | 26420 |
| Indianapolis, IN | 13 | 8.6 | 26900 |
| Las Vegas, NV | 10.2 | 7.1 | 29820 |
| Miami, FL | 12.7 | 11 | 33100 |
| Nashville-Davidson, TN | 5.5 | 12.9 | 34980 |
| Phoenix, AZ | 14.2 | 7.8 | 38060 |
| Richmond, VA | 7.5 | 13.8 | 40060 |
| Wichita, KS | 6.7 | 7.9 | 48620 |

Table 4
Occupations of Women in Construction Industry

| Occupations in the Construction Industry where the highest percentages of women work in chosen metro areas (2009) Census Occupation Coding Categories | With Tradeswomen Organization | | With OUT | |
|--|-------------------------------|---------|-----------------|---------|
| | Frequency | Percent | Frequency | Percent |
| Secretaries and Administration Assistants | 46 | 16.7 | 19 | 15.1 |
| Bookkeepers | 27 | 9.8 | 14 | 11.1 |
| Construction Managers | 19 | 6.9 | 11 | 8.7 |
| Managers of Office Administration Workers | 18 | 6.5 | 9 | 7.1 |
| Accountants, Auditors | 17 | 6.2 | 5 | 4.0 |
| Construction Laborers | 13 | 4.7 | 5 | 4.0 |

REVIEW OF HOMEOWNERS' AND RENTERS' ATTITUDES TOWARD HOMEOWNERSHIP AFTER THE FINANCIAL CRISIS

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Introduction

The United States economy and real estate market are still recovering from the 2008 financial crisis. One question that continues to be asked is how homeowners and renters are responding to the recovery. Mortgage credit is hard to obtain and many consumers suffer from damaged credit scores (Diamond & Rajan, 2009). Is owning a home still a part of the American dream for families? The purpose of this paper is to explain and discuss the findings from a recent survey on homeownership by the Colton Housing Group.

Research Purpose and Objectives

The purpose of the study was to look at homeowners' and renters' current attitudes towards homeownership and renting. Understanding the attitudes and challenges facing renters and homeowners after the financial crisis help educators tailor educational programs that will help consumers meet their housing needs; whether it be renting or getting back into a home. Policy makers should understand the consumers housing attitudes so that policies can be instituted that will support homeowners and renters.

Methods and Procedures

A 70-question survey, created by the Colton Housing Group, was distributed electronically via Zee-Probe. The survey was sent out June 29, 2011 and over the next five days responses were gathered from 1,954 homeowners and 1,051 renters. Six focus groups were also conducted throughout the United States. A description of the demographics of the sample is presented in Appendix 1.

The survey gathered information from consumers about whether or not they think this is a good time to buy a home, do they prefer to buy a new home or an existing home, why potential homeowners are not purchasing a home, barriers to homeownership in the post 2008 crisis, and concerns about the direction of the economy.

Results

The results of this study found that 68% of respondents feel like this is a good time to buy a home. Historically low interest rates, low home prices, and lots of available homes to choose from make this a great time for people who are ready to buy a home. Respondents who feel that this is not a good time to buy stated that the economy is not stable enough, credit is not easy to obtain, and housing prices may continue to fall.

The survey found that 66% of respondents prefer to own a home rather than to pay rent because they are building equity, and 50% said that homeownership is a better long term investment. Even after the financial crisis and housing bubble burst consumers still value homeownership.

One in five homeowners and one in three renters are considering buying a home in the next two years; which is promising considering the current state of the economy. Younger homeowners are more optimistic about buying homes right now. Twenty nine percent of renters under the age of 35 are considering purchasing a home and 18% of 35-44 year old renters are considering purchasing a home in the next two years.

The survey indicates that now is a good time to buy a home, so why are people not buying? Reasons cited by respondents for not purchasing a home include the following: my current home is fine, I

have no urgency to buy now, I cannot afford the down payment, I need to pay off my loans first, I may not qualify for a mortgage, my job situation is unstable, I need to improve my credit score, home prices haven't reached bottom, and foreclosures have destabilized the market. When respondents were asked what needs to change in order for them to enter the market three key responses were given: getting a better paying job, resolving problems in the mortgage market, and seeing some improvement in housing market conditions.

While many consumers, renters and homeowners, would like to enter the market, there are some barriers to homeownership that prevent many from purchasing a home. Homeowners are having a harder time getting the credit they need for a new loan and paying for higher down payments. High down payments are hardest for first time home buyers. Sixty five percent of renters said that they could not afford a down payment of 5% or less, 17% could make a down payment of 10%, and only 11% of respondents said they could put 20% down on a home.

The recession has had an impact on people's home buying plans. One in five homeowners stated that they have changed their home buying plans in the past three years. This number is even higher for households under the age of 35 where one in three homeowners has changed their plans due to the economy. Thirty two percent said they took advantage of lower home prices to buy a home, and 26% decided not to move because they couldn't sell their existing home.

Achieving homeownership is getting more difficult. Participants stated the following reasons as difficulties in getting a mortgage: I don't have as much money as I used to, my credit score is low, I need to pay my other debts, I do not have money for a down payment, my job situation is not secure, interest rates are too high, I am underwater on my current home, and I could not qualify for a home.

Implications

Counselors and educators prepare consumers to get back into homes if they choose to do so. Thus, counselors and educators help consumers understand how to rebuild their credit, and maintain good credit, so they can eventually purchase a home. This is especially important for consumers that have been through a foreclosure. Educators need to understand not only economic factors but also how consumers' attitudes and behaviors change with economic conditions.

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RESPONDENTS PROFILE

| | Sample | | | Population | | |
|--|----------|-----------|----------|------------|-----------|----------|
| | Total | Owners | Renters | Total | Owners | Renters |
| | 3,005 | 1,954 | 1,051 | 112.16 | 74.49 | 37.69 |
| Own/Rent | 100% | 65% | 35% | 100% | 66.4% | 33.6% |
| <u>Household Composition</u> | | | | | | |
| Husband & Wife with Children | 31% | 35% | 23% | 26% | 31% | 14% |
| Husband & Wife no Children | 22 | 24 | 17 | 22 | 28 | 8 |
| Singles M/F | 21 | 21 | 30 | 27 | 22 | 38 |
| Singles M/F with Children | 8 | 8 | 9 | 8 | 6 | 14 |
| Two or more unrelated/related individuals and others | 15 | 12 | 22 | 18 | 14 | 27 |
| <u>Age of Head of Household</u> | | | | | | |
| 20-24 yrs | 17% | 10% | 29% | | | |
| 25-34 yrs | 25 | 23 | 29 | | | |
| 35-44 yrs | 15 | 14 | 16 | | | |
| 45-64 yrs | 35 | 40 | 24 | | | |
| 65 yrs or older | 9 | 11 | 3 | | | |
| median (yrs) | 41 | 46 | 32 | 48 | 52 | 39 |
| <u>Combined Household Income</u> | | | | | | |
| Less than \$50,000 | 51% | 47% | 58% | 53% | 42% | 74% |
| \$50,000-99,999 | 37 | 38 | 34 | 28 | 33 | 20 |
| \$100,000 or more | 13 | 16 | 8 | 19 | 25 | 6 |
| Median | \$49,205 | \$53,782 | \$43,104 | \$47,000 | \$60,000 | \$28,400 |
| <u>Market Value of your Current Home or Monthly Rent (Median)</u> | | | | | | |
| | | \$174,000 | \$741 | | \$170,000 | \$808 |
| <u>Length of Stay at Present Place (Median (yrs))</u> | | | | | | |
| | 5 | 9 | 2 | 6 | 10 | 2 |
| <u>Year Structure Built (Median)</u> | | | | | | |
| | 1987 | 1985 | 1993 | 1974 | 1975 | 1971 |
| <u>Race/Ethnicity</u> | | | | | | |
| White (Non-Hispanic) | 66% | 69% | 59% | 71% | 78% | 55% |
| Afro-American (Non-Hispanic) | 17 | 15 | 21 | 12 | 8 | 20 |
| Hispanic/Latino | 11 | 10 | 12 | 11 | 9 | 18 |
| Asian | 7 | 6 | 7 | 6 | 5 | 7 |

RESIDENT ENGAGEMENT AND SUSTAINABLE LIVING

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The purpose of this project was to decrease water and energy consumption and increase recycling efforts by engaging renters in a multifamily apartment building in the effort. The building, open for occupancy in 2009, is a 49-unit, four-story building and 75% of the units are low-income tax-credit affordable, owned and managed by a non-profit housing developer in Minnesota. Because the owners of the building received funding through the Minnesota Housing Finance Agency, it was required to meet Green Communities Criteria (Enterprise Community Partners, 2011; Minnesota Green Communities and Minnesota Housing Finance Agency, 2007). This program ensures that housing most affordable to families is also built to be environmentally sustainable. The criteria include that structures be designed so that consumption of energy and water is minimized, materials used are beneficial to the environment, and the living environment is healthy for residents. Sustainable housing standards have been shown to improve overall health outcomes of adults and children (Breyse et al., 2011), so, in meeting these guidelines, the housing is assumed to benefit not only the owners (developers) but also residents over the life of the building.

However, while a building may be considered sustainable, the residents who move into the development may not understand those features, and, because of residents' practices, may undermine achieving the manager's estimates of operating costs. Recent research about what motivates individuals to conserve energy and increase recycling recognizes the difficulty of changing behavior (e.g., Attari, DeKay, Davidson, & Bruie de Bruin, 2011; Manning, 2009; Werner et al., 2009). Receiving feedback in monthly utility bills can influence behaviors to lower utility consumption (e.g., Carroll, Hatton, & Brown, 2009; Dillahunt, Mankoff, & Paulos, 2010). However, in many rental situations, particularly in buildings with less than 50 units, there may not be individual unit metering or submetering and so the landlord is billed for the aggregated utility costs of all residents, resulting in a lack of feedback for the residents. The dilemma is how to encourage low-income multifamily housing residents to use fewer resources when: they may have living practices that differ from typical practices; they may not receive feedback about their consumption; and, they may have values and priorities that are very different from the owners and managers of the buildings. Implementing a model of resident engagement could result in achieving goals (Annie E. Casey Foundation, 2003).

The residents of the building in this project are metered directly by the utility companies for their electricity use and for the natural gas that they use for space heating. Water consumption and natural gas used to heat water are metered at the building level and paid by management; management also pays for electrical and natural gas usage for the building's common areas. Over the first two years of the building's occupancy, water and natural gas use exceeded the manager's estimates, participation in recycling was low, and many residents complained about their high electricity bills. A program of outreach and education was initiated as a means of engaging with residents to reduce utility consumption, increase recycling, and build leadership among the residents. To accomplish this, the objectives of the project were to: (1) conduct trainings for residents; (2) improve resident knowledge about resource consumption and healthy living; (3) track water and energy use to see if there were reductions as a result of the trainings; and, (4) increase recycling efforts.

Over 60% of the residents in the building were East African immigrants, and, at the time of the project, there were more than 150 total residents, just over an average of three persons per unit (range of 1 to 8). The project team first conducted interviews with residents to identify residents' practices, knowledge, and values associated with resources; we interviewed 23 heads of households (47%). While most of the residents indicated that they had never heard the terms "green" or "sustainable," they were interested in learning more. We also learned, for example, that most residents never used their dishwashers; they did not believe that the tap water was safe to drink but were very concerned about

water as a global resource; they kept their apartments at about 74°F in the winter; and, they wanted to recycle but did not know how to do so in the building.

Based on the interviews and working with a review committee that included residents, we developed educational materials on energy, water, recycling and healthy living (adapted from Enterprise Community Partners, 2012). Ten two-hour informal outreach sessions were held in the elevator lobby and over 100 adults and 50 children stopped by over the 10 sessions (representing at least 17 different units). Following the informal outreach sessions, seven workshops were held to provide more depth about the topics—14 residents attended at least one workshop; total attendance was 26. Additionally, two residents were recruited and trained as peer leaders. They held a kick-off event at which seven households attended, and they made home visits to 25 residents' apartments to explain the information. Through these activities, the project connected with at least 35 householders in the building, 71%. Informally, residents expressed gratitude for learning how to reduce their utility bills, ways to save water, how to recycle, and ways to enhance a healthy lifestyle. The recruitment of resident leaders to communicate directly with other residents is helping to build resident engagement.

Preliminary comparisons of resource consumption are mixed, primarily because the education sessions were completed at the time the data had to be downloaded, so the impact of the training and engagement is not yet fully realized. Initial assessments appear that there were more savings in natural gas than electricity and water. And, while extra charges for contamination of the recycling bin with garbage have not occurred in the last year, other charges related to garbage pickup (loose bags, etc.) have been incurred.

In conclusion, owners, managers and residents each have a role in finding ways to reduce consumption and increase recycling. This project, working with low income multifamily housing residents, resulted in some basic recommendations. Engagement of residents in resource reduction is important to sustainability goals. Being aware of residents' current practices is important in making educational materials relevant to their lives. On-going education to residents is necessary to explain how to manage their utility consumption—one orientation on the day of move-in is insufficient. Recommendations for the design of future buildings must consider the impact of how residents will live in the buildings. For example, location of recycling centers and signage for encouraging key behaviors is important. Feedback is also important to sustain the desired behaviors. The outcomes have implications for design of affordable housing and best practices in property management.

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LINKING RURAL HOUSING POLICY AND PROGRAMS TO PROGRESS

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Housing has been the subject of public policy discussion and federal legislative action since the earliest authorized study of urban slums in 1892 (Meeks 2001). Since the Housing Act of 1949, housing legislation has focused on a national goal of providing a “decent home and suitable living environment for every American family” (Ziebarth 1991). The current recession emerging from the mortgage foreclosure crisis reasserts the role of the state in addressing critical housing and community concerns. This is even more urgent in rural America where a disproportionate amount of substandard housing remains a hazard for occupants and clusters of foreclosed and abandoned units create economic burdens for local governments as well as families. Reviewing the last 75 years of rural housing policy, this paper examines how policy priorities put money into practice and how funding addresses critical housing needs across the country.

Background

Across the rural U. S. there are just over thirty million housing units (HAC 2012). Comprising 23 percent of the nation’s housing stock, these units are home to more than 65 million people (HAC 2011, HAC 2012). Yet, in terms of public policy, housing in rural America is considered to be a “residual category”. The *Federal Register* on August 24, 2011 provided the official notice of the Urban Area Criteria for the 2010 Census for the Department of Commerce Census Bureau. The notice states that “(I)n delineating urban areas and the resultant classification of territory outside these urban areas as rural (Federal Register 2011). Over time the residual categorization of rural places has resulted in a persistent decline of federal funding in small towns and the countryside.

In many ways housing has dramatically improved in the past 75 years when the first major legislation establishing federal housing policy, the United States Housing Act of 1937, was passed. Housing quality has improved, housing remains relatively affordable for most households, and the rate of homeownership in rural areas remains over 70 percent (HAC 2012). While in 1950 for example, more than half of all rural residents lacked access to modern water and sanitation facilities; today less than one percent of US households lack complete plumbing facilities (Gasteyer & Vaswani 2004). Yet, according to the U.S. 2000 Census there still remained more than 1.7 million people, 670,986 households, without basic plumbing facilities (Gasteyer & Vaswant 2004). This study examined the history of federal housing legislation to identify programs and funding trends giving a glimpse into rural housing needs.

Methods

The research methodology of this study relied on secondary data sources. Documents including legislative hearing reports and academic research articles provided the basis for the historic review of housing legislation. A thorough review of the literature was conducted to identify the shifting priorities of the legislation over time. Funding trends for implementation of the federal legislation were obtained from data available at the Housing Assistance Council regarding appropriations over time for key rural housing programs. Using content analysis I examined the documents creating a timeline of legislative history. Next, I identified key themes and policy priorities and compared the results with population and housing data from the U. S. Census Bureau documents for corresponding decades. The qualitative and preliminary nature of this review prohibited the inclusion of statistical analysis or quantitative significance in my findings.

Findings

The findings indicate that generally federal housing legislation falls into a few major categories. These include (1) policies concerning financial systems that support housing financing, (2) policies that promote private sector development of housing, (3) public housing construction and management, (4)

tenant-based assistance, and (5) technical assistance and support for non-profit public and private housing assistance organization. Policies directed toward rural areas are consistent with these general categories, but tend to be focused on specific household categories such as providing low-income families homeownership opportunities, subsidizing the development of rental housing for low-income seniors, contributing financial support for public facilities such as community water and sewer systems, and funding targets to specific rural occupational groups, namely migrant farmworkers.

Over time, policies and programs tended to shift from fairly universal applications to those that address targeted audiences and locations such as funding for farmworker housing or community development targeted to Colonias communities. Program priorities change corresponding to social and economic context occurring at the time. For example, recent intense lobbying efforts to expand farmworker housing programs to include housing for food processing workers reflected changes in agricultural production methods that require fewer field-based migrant workers and an increased need for low-wage often immigrant employees in off-farm food processing plants.

Shifting priorities and target recipients of policy-making resulted in differential access to federal resources for rural and urban communities as well. In some ways this reflects the demographic trends toward more urbanized populations, yet the plight of those “left behind” or choosing rural locations remains. Originally housed in the Department of Agriculture (USDA), federal housing policy implementation since the mid-1960’s has been centered in the Department of Housing and Urban Development (HUD). This changing responsibility among federal agencies for administering housing programs has impacted funding levels for rural communities. In addition, the demise of the Farmer’s Home Administration within the U.S. Department of Agriculture (USDA) led to ongoing pressure to consolidate housing program administration within the U.S. Department of Housing and Urban Development (HUD).

Conclusions

Housing policy over the past 75 years has evolved into an ever more complex set of programs and implementation strategies with confusing and conflicting priorities and a patchwork of outcomes that has resulted in the failure to meet the contemporary national housing goal of a “decent affordable home in a suitable environment” for every American family. While we have made progress, there is still work to be done. This review of housing policy is a small step in identifying the gaps in funding and implementation challenges for housing in rural places.

A key shortcoming of this study regarding federal housing policy is the failure to include policies directed at housing in Indian Country. Tribal housing policy has a unique and complicated history. The relationships between the tribes and the federal government has resulted in land held in trust which has resulted in extreme housing disparities for Native Americans living on reservations. Addressing the housing needs in Indian Country is one of the most critical on-going rural housing policy issues facing the US today.

Another key rural housing policy challenge is responding to the rapid economic expansion in areas such as the Bakken Oil fields. Here oil and natural gas extraction has resulted in severe housing shortages and extreme housing costs that are straining the capacity of companies to meet their labor demands and communities to attract and keep public service employees including school teachers and law enforcement officers (Sulzberger 2011). Other rural housing problems include the difficulty providing appropriate housing and supportive services for frail elders, meeting housing needs persistent poverty areas including Appalachia and the Colonias, as well as community conflicts in high amenity areas with recreational, seasonal and second home developments.

Substandard housing in Indian Country, housing shortages and cost-burdens in areas of booming economies or any of the other rural housing issues are not “surprises” yet federal policy has failed to anticipate them or adequately address them. In order to change this, the reality of rural American housing needs more attention from researchers, politicians, and public policy makers. Better knowledge

regarding public opinions and perceptions regarding rural America are essential in directing policy priorities to meet the national housing goals.

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