



# PROCEEDINGS OF THE 2013 ANNUAL CONFERENCE OF THE HOUSING EDUCATION AND RESEARCH ASSOCIATION

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Editors

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 Concurrent Session I-B: Hyun-Jeong Lee  
 Concurrent Session I-C: Suk-Kyung Kim  
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 Concurrent Session II-B: Martha Keel  
 Concurrent Session II-C: Sarah Kirby  
 Concurrent Session III-A: Leslie Green-Pimentel  
 Concurrent Session III-B: Sarah Kirby  
 Concurrent Session III-C: Hyun-Jeong Lee  
 Concurrent Session IV-A: Leslie Green-Pimentel  
 Concurrent Session IV-B: Michael Goldschmidt  
 Concurrent Session IV-C: Martha Keel

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2010-2011	Ken Tremblay
2011-2012	Christine Cook
2012-2013	Sarah Kirby

American Association of Housing Educators/AAHE  
Housing Education and Research Association/HERA

Conference Locations and Dates

1946	Urbana, Illinois - April 1-4, 1946
1948	West Lafayette, Indiana - October 17-19, 1948
1957	Urbana, Illinois - October 9-12, 1957
1958	Ames, Iowa - October 22-25, 1958
1959	Stillwater, Oklahoma - October 7-10, 1959
1960	Ithaca, New York - October 12-15, 1960
1961	Manhattan, Kansas - October 11-14, 1961
1962	Minneapolis, Minnesota - October 18-20, 1962
1963	University Park, Pennsylvania - Oct. 30- Nov. 2, 1963
1964	East Lansing, Michigan - October 14-17, 1964
1965	Columbia, Missouri - November 3-6, 1965
1966	1st AAHE Conference, Urbana-Champaign, Illinois - October 26-29, 1966
1967	2nd Lafayette, Indiana - October 11-14, 1967
1968	3rd Athens, Georgia - October 27-29, 1968
1969	4th Davis, California - October 15-17, 1969
1970	5th Lincoln, Nebraska - October 14-16, 1970
1971	6th Blacksburg, Virginia - October 17-20, 1971
1972	7th Dallas, Texas - October 10-13, 1972
1973	8th Madison, Wisconsin - October 10-13, 1973
1974	9th Boston, Massachusetts - October 29- November 2, 1974
1975	10th Fort Collins, Colorado - October 7-11, 1975
1976	11th Columbus, Ohio - October 12-16, 1976
1977	12th Tucson, Arizona
1978	13th Minneapolis, Minnesota - October 11, 1978
1979	14th College Station, Texas - October 16-19, 1979
1980	15th University Park, Pennsylvania - October 6-8, 1980
1981	16th San Francisco, California - October 6-10, 1981
1982	17th Knoxville, Tennessee - August 10-12, 1982
1983	18th Lincoln, Nebraska - October 4-7, 1983

1984	19th Washington, D.C. - August 8-10, 1984
1985	20th Ames, Iowa - October 15-18, 1985
1986	21st Santa Fe, New Mexico - October 14-17, 1986
1987	22nd Newport, Rhode Island - November 2-7, 1987
1988	23rd Corvallis, Oregon - October 11-14, 1988
1989	24th Greensboro, North Carolina - October 24-27, 1989
1990	25th Columbia, Missouri - October 16-19, 1990
1991	26th Durham, New Hampshire - October 15-18, 1991
1992	27th Winnipeg, Manitoba Canada - September 16-19, 1992
1993	28th Columbus, Ohio - October 6-9, 1993
1994	29th Atlanta, Georgia - October 18-21, 1994
1995	30th Salt Lake City, Utah - October 11-14, 1995
1996	31st Kansas State University, Manhattan, Kansas - October 16-19, 1996
1997	32nd New Orleans, Louisiana - October 22-25, 1997
1998	33rd International Housing Conference, Seoul South Korea - August 5-8, 1998
1999	34th Orlando, Florida - October 18-23, 1999
2000	35th Stone Mountain Georgia - November 15-18, 2000
2001	35th Big Sky, Montana - July 22-July 25, 2001
2002	36th Minneapolis, Minnesota - October 23-26, 2002
2003	1st HERA Conference - Washington, DC (held in conjunction with AAFCS) -June 28-30, 2003
2004	2nd Chicago, Illinois - October 20-23, 2004
2005	3rd Denver, Colorado - October 4-7, 2005
2006	4th Cornell University, Ithaca, New York - October 8-11, 2006
2007	5th Charlotte, North Carolina - October 23-26, 2007
2008	6th Indianapolis, Indiana - October 7-10, 2008
2009	7th Santa Fe, New Mexico – November 1- 4, 2009
2010	8th Portland, Oregon – November 3 – 6, 2010
2011	9th Baton Rouge, Louisiana - October 12 - 15, 2011
2012	10th Roanoke, Virginia – October 28-31, 2012
2013	11th Tulsa, Oklahoma – October 27-30, 2013



Refereed Abstracts  
Poster Presentations

## **Learning about housing organizations and agencies as a way to improve verbal communication**

Axton Betz-Hamilton, Eastern Illinois University

Effective verbal communication skills are essential for college graduates to obtain employment (National Association of Colleges and Employers, 2010). Many colleges and universities are aware of students' need to develop verbal communication skills and have incorporated courses that emphasize verbal communication in graduation requirements.

Introductory housing courses can provide an opportunity for students to develop verbal communication skills, particularly within group settings. A presentation assignment was developed for a sophomore-level introductory housing course at a Midwestern university, where students were required to work with a partner to develop a presentation about an organization or agency related to housing (e.g., Department of Housing and Urban Development, Habitat for Humanity).

This assignment was designed to enhance students' verbal presentation skills while having them share information with their peers that will be useful in their future careers, as the majority of students who enroll in this course are interested in careers in family science. Students were required to address the following points in their presentation:

1. What does this agency/organization do?
2. Who do they serve or assist?
3. What educational information do they provide?
4. Does the agency or organization post job announcements? If so, what are the titles of some of the positions? What qualifications are necessary for the positions?
5. Does the agency/organization sponsor events? If so, what are they? Who is the target audience for these events?

The instructor developed a list of organizations and agencies students could choose from to develop their presentation. Partners were self-selected based on student interest in each organization, and students were required to research and develop their presentations outside of class. With this course averaging 50 students per semester, 25 five-minute presentations are given during class time. Students' are evaluated based on the quality of their presentation (e.g., volume, each partner speaking an equivalent amount of time, eye contact) as well as addressing each of the five points listed above.

Feedback regarding this assignment was solicited via e-mail from students who were enrolled in the Fall 2012 section of this course. Of the five students who responded, all students indicated they felt this assignment improved their verbal communication skills. Two student quotes supporting this improvement are:

"I am now comfortable standing in front of a crowd and speaking to them."

"[I] made more eye contact on my other presentations after that one."

Some students noted that the instructor feedback they received on their presentation was essential in improving their verbal communication skills. Additionally, through this assignment, students gained knowledge on various organizations and agencies that may provide them with future internship and full-time employment opportunities.

#### Reference

National Association of Colleges and Employers. (2010). *Job outlook: Verbal communication skills most sought by employers*. Retrieved May 20, 2013, from [http://www.naceweb.org/so12082010/college\\_skills/](http://www.naceweb.org/so12082010/college_skills/)

**Considering comfort and dignity in older adult assisted living congregate housing:  
A pilot survey**

Sylvia Chaney, Oklahoma State University

Paulette R. Hebert, Oklahoma State University

The goal of this study is to explore interior design's potential to affect residents' comfort and dignity in assisted living congregate housing. With IRB approval, a new perception survey instrument was developed, which adapted Dr. Katherine Kolcaba's holistic comfort taxonomy. The survey was administered on-site to assisted living residents in a small town in the south central U.S. The survey was developed as a self-administered instrument, using a five-point, Likert-type scale with a sixth "don't know" option. Twenty-five respondents, mean age 86, 92% of whom were female, completed the survey.

Respondents' perceptions of and experiences in their current older adult housing facility relative to comfort, dignity, and their mental and physical well-being were probed in the survey. Specific survey questions targeted comfort and dignity in terms of ease, relief, and transcendence in the physical, social, and psychospiritual contexts; daylighting, electric lighting and light trespass; sociopetal and sociofugal aspects. In order to further probe their experiences, respondents were asked to consider a series of statements that examined specific interior elements, e.g. daylight, furniture surfaces, etc., that may have affected the comfort they experienced. Parallel items examined the same elements in terms of dignity. Respondents were also asked to give their own definitions of comfort and dignity.

The coded survey data were analyzed, by examining the percentages and means of responses. Mean responses per interior design element were compared: higher means indicated greater importance to comfort. Results suggested that the participants considered plants (mean response 4.65), daylight (4.20), and, to a lesser degree, smooth textures (3.85) and warm temperatures (3.80) in the interior environment of assisted living spaces to be important to their comfort. When considering dignity, results suggested that the participants considered vegetation

(mean response 4.37), sunlight (4.11), and, to a lesser degree, smooth textures (3.79) and cool colors (3.60) to be important. Respondents' numerous written definitions of "comfort" varied and included statements relative to room temperature, medication, pain, friends, personal safety, residents' finances and the interior décor of their housing unit. Respondent's definitions of "dignity" included references to self-respect, personal appearance, character, and ability to communicate.

Further research is necessary to refine the survey and administer it to a larger, geographically and gender diverse sample.

## **Economic benefits of building assets through homeownership among low to moderate income households of a rural southern county**

Leslie Green-Pimentel, Delta State University

Paulette Meikle, Delta State University

### Introduction

Low to moderate income households of a rural southern county face many economic challenges such as persistent poverty, low educational attainment, high unemployment, and low income/wages. These economic challenges contribute to the wealth disparity of low to moderate income households. Accumulation of assets (such as homeownership, education, or small business development) among low to moderate income (LMI) households can improve economic well-being. Acquisition of assets carries economic benefits for the household. Specifically, homeowners, compared to renters, are more likely to engage in saving for a specific purpose such as emergencies (Bhargava & Lown, 2006) or to invest in another asset such as education or a business (Grinstein-Weiss, Curley, & Charles, 2007). Additionally, children in homeowner households benefit through lower high school dropout rates (Green & White, 1997) and higher math and reading achievements in school (Haurin, Parcel, & Haurin, 2002). Homeowners, compared to renters, have been shown to engage more in borrowing behavior such as acquiring consumer debt; but this may be attributed to the idea that they have capital and credit by nature of being a homeowner (Schooley & Worden, 2010).

### Purpose

The purpose of this research is first, to examine specific financial practices by housing status among LMI residents of a rural southern county; and second to promote, where appropriate, homeownership as a viable means of asset building for LMI rural households in this southern state. This research is part of a larger study assessing asset building as a means of alleviating intergenerational poverty and increasing self-sufficiency among LMI households in a

rural southern county. This research will benefit practitioners and community leaders interested in promoting asset building among LMI residents in this southern state.

### Methods

The sample for this research consists of 104 LMI individuals in a rural southern county. Data were collected by graduate students through face to face interviews during October and November of 2012. Interviews consisted of a variety of questions regarding demographic and financial practices and included both quantitative and qualitative formats. Demographic questions included the usual suspects of gender, age, income, race, etc., financial practice questions included savings and borrowing behavior, and money management. Specific variables will be described in the presentation. Data were analyzed using SPSS and employed basic descriptive statistics, cross tabulations, and bivariate measures of association. Results will be shared in detail in the presentation. In short more owners than renters track their money, know what percent of income is being spent on specific expenses, and save for emergencies and the future (i.e. for their child's education). The results suggest that in general homeowners in the sample exhibit better financial practices than renters in the sample. This finding is supported by the prior literature discussed above (Bhargava & Lown, 2006; Grinstein-Weiss, Curley, & Charles, 2007; Schooley & Worden, 2010). Promoting homeownership, where appropriate, as a means of asset building among low to moderate income households in a rural southern county will be discussed in the presentation.

### References

- Bhargava, V., & Lown, J. M. (2006). Preparedness for Financial Emergencies: Evidence from the Survey of Consumer Finances. *Journal of Financial Counseling & Planning*, 17(2), 17-26.
- Green, R. K., & White, M. J. (1997). Measuring the benefits of homeownership: Effects on children. *Journal Of Urban Economics*, 41(3), 441-461.
- Haurin, D. R., Parcel, T. L., & Haurin, R. (2002). Does Homeownership Affect Child Outcomes? *Real Estate Economics*, 30(4), 635-666.

Schooley, D. K. & Worden, D. (2010). Fueling the Credit Crisis: Who Uses Consumer Credit and What Drives Debt Burden? *Business Economics*, 45(4), 266-276. doi:10.1057/be.2010.25

Sponsorship of research: This research is part of a larger research study sponsored by: the Division of Social Sciences and History at Delta State University, the Coalition for a Prosperous Mississippi, Florida A&M University, and the Southern Regional Asset-Building Coalition.



## **Examination of existing illumination at an urban continuing care retirement center**

Paulette Hebert, Oklahoma State University

Mihyun Kang, Oklahoma State University

Gina Peek, Oklahoma State University

Xiaofei Zhang, Oklahoma State University

The number of older adults in the United States is increasing. One of the major consequences of this demographic shift is the growing demand for continuing care retirement center (CCRC) facilities. CCRCs provide independent living, assisted living and nursing care at the same site for their residents. Older adults residing at these housing facilities and elsewhere have special visual needs. With advancing age, the tissues of the eyes become more fragile, and the pupils become smaller. Older adults need greater amounts of lighting to compensate (Illuminating Engineering Society, 2007). The goal of lighting in any built environment is to provide sufficient illumination to perform visual tasks safely, effectively, and accurately (IES, 2007).

Interior tasks in a CCRC's public spaces may include walking through the buildings' entries, hallways, and lobbies, as well as the performance of reading and related visually intensive activities. Additionally, recreational pastimes such as swimming and fine dining may also be considered visual tasks (IES, 2007). CCRC residents need even lighting and higher illumination levels without glare (Noell-Waggoner & Dupuy, 2010). Higher light levels with no glare are often achieved with indirect illumination.

The purpose of this study was to examine existing illumination at an urban CCRC in south central US and compare it to Illuminating Engineering Society (IES) recommendations. A field study was conducted in the following areas: lobby, hallway, fine dining room, activity room, chapel, and indoor swimming pool deck. The researcher examined the sites' existing lighting fixtures and through visual inspection determined if they were direct or indirect.

The researcher utilized industry procedures to temporarily mark 2'-0" or 4'-0" square grids using masking tape on horizontal and vertical work plane surfaces for measurement guides. On

vertical surfaces, such as walls and windows, the bottom of the grids were at “workplane” height, at 0’-0” above finished floor or 2’-6” above finished floor level, as applicable to the tasks per the IES. The researcher documented the existing lighting fixtures and effects and measured the visible (VIS) light in footcandles (fc) with a hand-held General Electric (GE) lighting model 217 “triple range” light meter. Both daylight and electric light were considered and measurements occurred during daylight hours. Twenty-one different light level measurements in the selected interior public spaces were recorded. Hallways and activity rooms had no daylight contributions.

Lighting levels means in the hallway, chapel and swimming pool deck were found to greatly exceed IES recommendations. Means of lobby, dining room and activity room were lower than recommended. Rooms varied in maximum to minimum (MAX: MIN) levels, indicating uneven lighting. Most of the CCRC illumination was found to come from direct illumination.

A lighting renovation was recommended for this CCRC facility. A renovation would help lighting meet IES recommended light levels, reduce MAX: MIN light levels, and reduce glare from direct light. The CCRC is currently undergoing a major renovation and expansion.

#### References

- Illuminating Engineering Society. (2007). *Lighting and the visual environment for senior living (ANS/IES RP-28-07)*. New York, NY: Illuminating Engineering Society of North America.
- Noell-Waggoner, E., & Dupuy, R. J. (2010, April 10). Eye on the boomers. *LD + A Magazine*.

**Continuing care retirement center field study and the Americans with Disabilities Act:  
Facility management undergraduate students consider compliance**

Paulette Hebert, Oklahoma State University

Mihyun Kang, Oklahoma State University

Rebekah Thompsen, Oklahoma State University

The Americans with Disabilities Act (ADA) was passed on July 26, 1990, was amended in 2008, and is currently Federal law. It is particularly important for senior housing facilities to meet the ADA compliance to accommodate older adults (Bachelder & Hilton, 1994). In a Continuing Care Retirement Center (CCRC), diverse senior housing facilities such as assisted living, independent living and nursing care are housed at the same site. Older adults may move into a CCRC while still living independently and stay until their end of life.

The purpose of this study was to examine the ADA compliance in a CCRC located in the south central U.S., utilizing the *Americans with Disabilities Act checklist for Readily Achievable Barrier Removal: Checklist for Existing Facilities Version 2.1* (Adaptive Environment Center and Barrier Free Environments, 1995). In partial fulfillment of an undergraduate course, seven teams of 2-3 students traveled to a nearby city to perform a nighttime field study during their regular evening class period.

The large CCRC was built in 1990, was Continuing Care Accreditation Commission-Commission on Accreditation of Rehabilitation Facilities (CCAC-CARF) accredited and locally owned. Students were given a tour of the CCRC and were furnished with a site plan and partial floor plan on which the instructor had color coded zones indicating each team's scope of work. Students were allowed to freely visit indoor and outdoor public areas of the facility and they visited unoccupied resident rooms only and while accompanied by a CCRC staff person. The research teams examined, photo-documented and compared interior and exterior elements to ADA requirements. Applicable measurements were made using hand held tape measures. The student researchers also produced detailed field notes and sketches. The following areas and

items of the CCRC were considered: parking lots, loading zones, ground surfaces, curbs, ramps, stairs, landings, walks, patios, driveways, streets, signage, handrails, doors, door clearances, interior flooring, resident rooms, entries, closets, lobbies, dining rooms and swimming pool decks.

The researchers found the vast majority of non-compliance issues in the CCRC's parking lots and entries. These included non-compliance with the following ADA priorities for parking lots: minimum clearances, dedicated spaces for vans, parking lot markings, pictograms and braille markings, and for entries: minimum clearances, carpet pile height. However, at least one team also reported non-compliance issues with the following items or areas: signage, landings, ramps, curbs, railings, door clearances, carpets and closets. Furniture (benches, chairs) were located too close to doors and may impede access. Raveled carpet and loose rugs were not secured and may be trip hazards. Some team members, who considered portions of the same large parking lot, disagreed with compliance determinations within and across research teams. It was determined that some ADA requirements are subject to interpretation. Results of this field study were presented to the CCRC for their consideration and action.

The CCRC is currently undergoing a renovation and will meet the ADA compliance. It is recommend building strong relationships with senior housing facilities personnel prior to requesting access to measure and photograph facilities.

#### References

- Adaptive Environment Center and Barrier Free Environments. (1995). *Americans with Disabilities Act checklist for readily achievable barrier removal: Checklist for existing facilities version 2.1*. Boston, MA: Author.
- Bachelder J.M. & Hilton, C.L. (1994). Implications of the Americans with Disabilities Act of 1990 for elderly persons. *The American Journal of Occupational Therapy*, 48(1), 73-81.

## Home design features promoting place attachment and perceived autonomy for older adults

Mihyun Kang, Oklahoma State University

Melinda Lyon, Oklahoma State University

Jessy Kramp, Oklahoma State University

Older adults try to maintain their existing residential responsibilities in the light of fading independence (Lawton, 1977). Although alternate housing for older adults has gone through extreme modifications since the 1960s, problems with an existing facility may stem from missing concepts such as place attachment and perceived autonomy. *Place attachment* is regarded as a development of a personal relationship with a specific place, which can then help to instill a sense of comfort and security within an individual (Oswald, Jopp, Rott, & Wahl, 2010; Shenk, Kuwahara, & Zablotsky, 2004). *Perceived autonomy* envelops an individual's maintained independence and control, which have been found to be important to older adults (Bronstein et al., 2009; Peace et al., 2011). This study examined the perceptions of older adults concerning what home design features would be beneficial in senior cohousing. This study sought to understand home design features promoting place attachment and perceived autonomy for older adults.

Interviews were conducted with a purposive sample of 10 older adults, between the ages of 55 to 85, living within a rural community in the Midwest who were in the process of organizing a senior cohousing community. The interviews examined the desired home design features of these potential residents in senior cohousing. Audio recordings from the individual interviews were transcribed, and grounded theory and the computer software NVIVO were employed to identify reoccurring themes.

The most common themes related to place attachment and perceived autonomy were downsizing, taking personal belongings, social engagement, privacy, and universal design. Regarding each theme, participants expressed desired home design features. The need to sell participants' individual homes was a driving factor in pushing them to begin *downsizing*. They

preferred an open space with high ceilings, as their new floor plan would be smaller in square footage than their current homes. Participants commented about *taking personal belongings* to their new homes. Having adequate display space in their new homes was necessary for personalization. Participants believed *social engagement* in the community was crucial. Participants believed the individual homes needed to face one another to ensure that community relationships would naturally flourish through daily communication. Participants noted having front porches facing other members' front porches just across common sidewalks would promote informal communication. Participants spoke of two main areas of *privacy*: privacy within the homes, and the private back patio spaces on the individual homes. Participants preferred to have extra bathrooms and/or bedrooms for visitors. Their group had already discussed the community's terms of privacy outside the homes and members were to respect one another's privacy when they were on their back patios. Though participants were unaware of the professional term *universal design*, they required home design features associated with universal design principles.

This study explored the individual homes in senior cohousing communities and how home design features could promote place attachment and autonomy and therefore assist older adults to age in place. This study could be used to further enlighten older adults and the general public to a new alternative for housing in later life.

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## **The sense of community in multifamily rental housing**

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### **Rationale**

The “American Dream” is equated with ownership of a traditional house. However, headlines indicate a recent shift toward renting and apartment living. Yet there is so much that isn’t known about this increasingly popular housing option. Studies have been conducted on the “sense of community” in a variety of residential settings, but with little application to multifamily rental housing. Such research is especially valuable in better understanding apartment communities in general, as well as in comparing this housing option to the traditional “American Dream” of single-family home ownership.

### **Objective**

The objective of this study was to demonstrate the use of a “sense of community” scale in multifamily rental housing.

### **Methodology/Procedures**

A convenience sample included residents of two North Carolina apartment communities. Using the Sense of Community Index II (SCI-2) created by Chavis, Lee, and Acosta (2008), respondents were asked to express their attitudes about the community on 24 items using a Likert scale from a low of 0 to a high of 3. This instrument was previously determined to be a valid measure of “sense of community” when correlated with life satisfaction, civic/political participation, and social/cultural participation, and also highly reliable (coefficient alpha = .94). For a two week period, the manager of each community asked each resident that came into the clubhouse to participate in the study, resulting in 21 usable surveys.

Each respondent's Total Sense of Community score was calculated by totaling responses to all 24 items. Subscale scores for Reinforcement, Membership, Influence, and Emotional were calculated using the subscale scoring procedures provided with the instrument. To aid in comparison, further analysis was done to calculate percentages on the subscales so that subscales based on varying numbers of items could be compared.

### Results

Overall results indicate that apartment community residents were easily able to relate to the questions on the SCI-2 instrument. Specific responses varied from a low of 16 to a high of 68 on the 72-point Total Sense of Community score. Subscale scores were equally varied, ranging from a low of 17% for one respondent on the Membership subscale to a high of 100% on the Reinforcement subscale for another respondent.

### Conclusions

Findings indicate that SCI-2 can be used to analyze the Sense of Community among residents of multifamily rental housing. Although only two apartment communities were used in this study and only 21 respondents, the results provide a starting point for future research specifically related to Sense of Community as well as general attitudes toward multifamily rental housing.

### Implications:

As more Americans seek out diverse housing options, more research is needed to add to the general body of knowledge of multifamily rental housing. Apartment community managers will find this Sense of Community study especially useful and should consider administering the SCI-2 instrument to their residents to better understand residents' feelings toward the community. Such information could aid in recruitment and retention of apartment community residents.



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## **Korean-American baby boomers' lifestyles and their preferences for postretirement homes**

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### **Background and Purpose**

Becoming an aging society has raised a strong need for the housing development that meets the growing demands of baby boomers who will be one of the main consumers in the future housing market. Compared with seniors in the past, baby boomers are recognized as a healthier group because of the longer life span made possible by improved medical services and growing interest in health. They also have better financial capabilities than the previous aging generation and are more active in expressing their needs.

Many Korean-American baby boomers who have experienced cultural changes when they were young and adjusted to new housing environments in a different culture are about to retire. Housing consumers' needs become diversified due to changes in the social and familial structure and greater interest in the quality of residential environments. Housing for Korean-American baby boomers should thus be designed and supplied to meet their various needs and lifestyle characteristics. It is hard to find a study focusing on their lifestyles and needs for postretirement homes, however, although many existing studies examined diverse housing consumers' needs and preferences.

This study was conducted to characterize Korean-American baby boomers' lifestyles and examine the relationships between their lifestyles and preferred characteristics of postretirement homes.

### **Methods**

A questionnaire survey was conducted from June to September 2012 examining lifestyles and preferred characteristics of postretirement homes. The lifestyle items in the questionnaire were based on the VALS ("Values, Attitudes and Lifestyles") tool, which is one of the popular and

reliable research tools for measuring lifestyles (Context Institute, 2012). Example questions from VALS to measure preferences and desires were: "I love to make things I can use every day," "I like to learn about art, culture, and history," or "I dress more fashionably than most people." In addition, the questionnaire included the items that investigated respondents' preferences and desires for their postretirement homes. We employed a purposive sampling method that targeted Korean-Americans born from 1955 to 1963 in the US who were residing in New York, Washington DC, Chicago, Dallas, Detroit, Lansing, Grand Rapids, and San Francisco. The participants were recruited through several Korean organizations in local communities. The participation was voluntary without any compensation offered. We collected 247 questionnaires and finally used 242 complete ones for the analysis. We analyzed data by using factor analysis, cluster analysis, one-way ANOVA, and crosstabs.

### Findings and Suggestions

Among 242 responses, 59.5% were females and 40.5% were males. More than 91% of respondents were married, either living with their spouses (21.1%) or with more than one child (73.2%). Annual income ranges and occupations varied. Their current housing types were single-family homes (57.6%), townhomes (10.3%), condominiums (10.3%), and rental apartments (21.0%).

Respondents in general preferred the three bedroom, single-family detached home as their postretirement housing. They preferred city outskirts or suburban areas over urban.

From the factor analysis, we obtained six main factors. They were named "uniqueness-excitement oriented," "intelligence and knowledge pursuing," "practice oriented," "trends-fashion oriented," "conservative," and "religion conscious." Then, we conducted cluster analyses and obtained four clusters (or groups) consisting of those six factors differently. The four clusters were defined as "innovators," "fashioners," "conservatives," and "makers." We referred to VALS Framework (Strategic Business Insights, 2012) for these clusters' names.

The results showed that all four groups had their own lifestyle characteristics. The Innovators had professional jobs and were highly educated in general. The Fashioners were

interested in contemporary trends and pursuing diverse experiences. The Conservatives showed high self-confidence and tended to preserve current life patterns. And the Makers were religiously serious and liked to take practical actions after they made some plans.

Housing preferences differed among the four groups. For instance, the Innovators desired larger homes, while the other groups preferred smaller and affordable homes. The four groups also showed differences in preferred housing prices, housing types, floor levels, and residential locations. We also analyzed their opinions about important housing environmental characteristics of postretirement homes, such as important community facilities (i.e., swimming pool, library, and fitness center), preference to homes close to children, homes having recreational activity spaces, and residential life-support services.

We expect these findings will give structure to fundamental design guidelines and important planning elements for the postretirement homes where Korea-American baby boomers will experience aging-in-place.

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## How housing matters: Expanding the audience

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Fact sheets -- accessible, research-based, and expert-reviewed -- are successful for delivery of consumer information by Cooperative Extension (Hebert, Peek & Kang, 2012). In a survey of Extension professionals, Rodewald (2001) found printed fact sheets preferred by professionals and for use with clientele. This abstract describes the development and evaluation of a fact sheet series and suggests ways to improve utilization of these educational tools.

A fact sheet series in Virginia was developed for the Healthy Homes Partnership, an initiative of the U.S. Departments of Housing and Urban Development and Agriculture (Booth & Peek, 2013). A unique partnership at Virginia Tech, involving two students, a faculty member, the Office of Communications and Marketing in the College of Agriculture and Life Sciences, and two Cooperative Extension Agents produced the six fact sheets. Under the banner, *How Housing Matters*, each colorful fact sheet, available on the Virginia Cooperative Extension (VCE) website, addressed basic topics on healthy homes:

- *Lead-safe housing* is healthy housing.
- Fewer *hazardous products* mean a healthier home.
- Eliminate *radon* for a healthy home.
- A home without *mold* is a healthy home.
- A clean home can help with *asthma and allergy* concerns.
- *Clean air* means a healthy and comfortable home.

After one year, one of the student authors conducted independent evaluation research to assess the impact and utilization of the fact sheets. The 17 Family and Consumer Science Agents whose program responsibilities included housing were surveyed and traffic on the VCE website was recorded.

Table 1 presents a summary of survey results. Ten of the agents surveyed had not used the fact sheet series because they had not received any requests for this kind of workshop, they were not familiar or aware of the fact sheets, or because it was not their area of expertise. Of the agents that were aware of the fact sheet series, only three had incorporated the fact sheets into their workshops. Five agents planned to use them in future workshops.

The web traffic/usage of the fact sheets is also reported in Table 1. Two caveats must be considered in evaluating this information. First, the fact sheets were released over an eight month period in 2012, with *Household Hazardous Products* being the first and *Allergens and Asthma* being the last. . Second, as Hebert, et al. (2012) suggest, a download number may represent a single user, or a user who makes multiple copies.

Virginia currently has no statewide Cooperative Extension leadership in housing, resource management, or related areas. Educational resources need to be part of broad-based program to be more fully effective. Lack of leadership and statewide programming in housing can help explain the limited utilization of the fact sheet series. In concluding the evaluation study, the student researcher recommended ways to better utilize the fact sheet series:

- Identify agents to give leadership to programming on housing topics using the fact sheets.
- Explore other areas that could benefit from the use of the fact sheets, such as childcare and health, to expand the audience for these educational materials.

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Table 1. Survey Results

Fact Sheet	Number of times used	Number of times recommend to a client	Web Traffic	
			Page Views	Downloads
Mold	4	5	92	152
Air Quality	3	2	51	96
Allergens & Asthma	2	3	54	91
Hazardous Household Products	2	2	104	104
Radon	1	3	52	79
Lead	0	1	37	82
Not Sure	1	3	--	--
N/A	8	7	--	--

## **How does culture influences housing choices and behaviors of residents of the Pine Ridge Reservation?: Preliminary results**

Dana Tell, Eastern Illinois University

Axton Betz-Hamilton, Eastern Illinois University

This research project investigates the culture on the Pine Ridge Reservation in South Dakota and how it influences housing choices and behaviors. Certain aspects in their culture, like “Making of Relatives” when one choses to take on the responsibilities of being blood-related to another or gatherings that include extended family members, may influence what they choose for housing or their behaviors, such as how they use their house. To do this study, a qualitative case design was employed with four members of the Lakota Sioux Tribe who live on the Pine Ridge Reservation.

Criteria for inclusion in this research included (1) Participants had to reside in a house on the reservation and (2) Participants had to be a member of the Lakota Sioux Tribe. Semi-structured interviews were conducted face-to-face in participant’s homes and consisted of 10 questions with probes designed to gain a deeper understanding of the participant’s initial responses. Observations of the participant and their home were kept in the form of analytic memos. Photographs were also taken after each interview to better explain any situation or item. The collection of multiple forms of data adds to the trustworthiness of the findings (Glesne, 2006). The technique of explanation building was used to analyze the data. Yin (2009) describes explanation building as explaining a phenomenon by asking “how” or “why” something happened. Using this approach, I explain how the culture can influence housing choices and behaviors on the Pine Ridge Reservation.

The preliminary results from this project include data from one participant. Emerging themes developed from this initial data analysis include “overcrowding” and “Native American Church activities are important to the family”. Future directions of this research, including implications for program development, will be discussed.



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## **Student housing in historic buildings**

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Historic preservation offers substantial contributions to sustainable environment and economic development (Listokin, Listokin, & Lahr, 1998). It is also a way to preserve the memory of a community (Barthel, 1996). In the United States, land-grant universities were built from 1862 to 1890, supported by the Morrill Acts. Currently, there are a total of 217 land-grant institutions (Association of Public and Land-Grant Universities, 2011), which have more than 150 years history of historic buildings on campus. These historic buildings are still in use by contemporary students. Thus, we conducted a qualitative research about students' perceptions, satisfaction, and preferences for public spaces and dormitory rooms used for student housing in historic buildings, about which could be a reference to future renovations of historical buildings. The purpose of this presentation is to report findings from site visits and focus group interviews conducted with college students living in student housing in historic buildings.

In April 2013, researchers conducted site visits and focus group interviews with 10 college students, ages 19 to 23 years old, in student housing in historic buildings, Windsor Hall at Purdue University, IN. Purdue University is the only land-grant university in Indiana, and it has 39,256 enrolled students (Purdue University, 2013). About 30 percent of them live in on-campus housing (Purdue University, 2012). Windsor Hall as the oldest all-female student housing which was built in 1934 and still in use for student housing today, was selected for this study. Each of the four focus groups was consisted with 2-3 students and the interview lasted about an hour to discuss student's feeling and opinion about their dormitory room and public space in Windsor Hall.

The first and the lower ground floor were recently remodeled. On the first floor, historic features have been preserved, while the lower ground floor was remodeled in a contemporary style. The focus group participants liked having the options of the historic features in the lobby, a study room, and a lounge on the first floor, and the modern design of the recreation room, laundry room, and TV lounge on the lower ground floor. Especially, respondents made positive comments about keeping the historic

features present in student housing. They were satisfied with historic features such as the curved lines of ceilings and the furniture, dark wood textures, and a fireplace, which provide a home-like feeling in this public space. However, participants mentioned that the study room on the first floor should be quieter and more private, and should have more tables and sitting areas for studying. In terms of dormitory rooms, participants were highly satisfied with the different designs and sizes of the rooms. They mentioned that the different designs make each room unique, a feature that is hard to find in contemporary student buildings. They especially liked the high ceilings in the dormitory rooms that make them seem more spacious. However, participants were dissatisfied with small storage areas and would like to have larger closets. They also would prefer to have historical design in their dormitory rooms that is consistent with the public space on the first floor.

Overall, participants were satisfied with living in student housing in historic buildings. They appreciated the uniqueness of historic buildings that preserve the reputation and the history of the university. However, functional design that meets contemporary students' lifestyles and needs should be considered. This study can be expanded to different student housing in historic buildings in the nation using qualitative and quantitative research methods.

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## **Demographic and housing characteristics of Hispanic renters in the United States**

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Kathleen Parrott, Virginia Tech

### Introduction

Increasing homeownership rates demonstrate the benefits of homeownership, although not all segments of the population are benefiting equally (Cortes, Herbert, Wilson, & Clay, 2007). In 2010, Hispanics were the largest and fastest-growing minority group with 50.5 million (16.3 %) (U.S. Census Bureau, 2011). Their homeownership rate was 48.4% which was lower than the 74.8% for non-Hispanic Whites (U.S. Census Bureau, n.d.). Several recent studies exploring factors influencing Hispanic homeownership used secondary data sets, such as *Health and Retirement Survey* (See Flippen, 2001) and *Survey of Consumer Finances* (See Gabriel & Rosenthal, 2005). This abstract reports a study that employed the 2009 *American Housing Survey* to present and discuss demographic and housing characteristics of Hispanic renters in an effort to understand more recent trends of Hispanic renters, especially during the recent 2009 recession in the United States. The study aids in understanding the nature of Hispanic renters and suggests future research.

### Methodology

The national sample of the 2009 American Housing Survey of the U.S. Census Bureau was employed. The useable sample was 5,276 Hispanic householders (7.2% of the total U.S. national sample). Descriptive statistics were used to describe the housing and demographic variables.

### Findings

Almost half of the respondents were renters (50.9%, n=2,687) and the median monthly paid rent was \$764. The median age of the renters (37) was 10 years younger than the median age of homeowners (47). The median household incomes of the renters were \$27,000 and almost 60% of the

renters had housing affordability issues, paying more than 30% of household income for housing, whereas only 45.3% of the homeowners had the same issues. Hispanic renters showed a higher proportion of female householders with 51.9%, compared to 39.5% of the homeowners. The majority of the Hispanic renters (70.2%) graduated from high school or less than high school, compared to 54.6% of the homeowners. The majority of the homeowners (69.4%) were married, whereas only 41.2% of renters were married. Almost 40% of the renters were not U. S. citizens, compared with only 23.7% of the homeowners. The majority of the renters resided in the Western (36%) and Southern (26.1%) U.S. followed by 26.1% in the Northeast and 10.1% in the Midwest. Almost 20% of the renters came to the U.S. between 1991 and 2000, followed by 14.7% who came after 2000, and 11.4% who came between 1981 and 1990.

#### Discussion and Implications

This study revealed several distinctive demographic and housing characteristics of Hispanic renters. Renters are more likely to be younger, non-married, and female-headed compared to homeowners. They also have lower household incomes and educational attainment. These findings support previous Hispanic homeownership studies in that many of these characteristics are negatively associated with the likelihood that a Hispanic household will become homeowners (See Russell & Atilas, 2008). Unlike the non-Hispanic White population, the Hispanic population has more diversity in terms of citizenship status, birth place, and immigration status. Existing studies suggest that the concentration of Hispanic households in metropolitan areas where housing markets are expensive is another barrier to Hispanic homeownership (Cortes et al., 2007; Frey, 2001). To understand the nature of Hispanic renters, therefore, both these socio-economic factors and Hispanic-specific barriers (i.e. geographic distribution) should be considered. Findings from this study suggest future studies to explore the association of those unique variables with not only the likelihood of being a homeowner but also perceptions on housing tenure as possibly ethnic or cultural preferences. These studies will provide sound backgrounds for policy makers to choose appropriate policies on both improving Hispanic homeownership rate and providing more affordable rental housing especially in metropolitan areas.

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Refereed Abstracts  
Oral Presentations

## **The role of land tenure, property rights and social discrimination in the informal community housing crisis in Sana'a, Yemen**

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Property rights and land tenure have assumed increased economic, political and cultural significance in Yemen in recent years. Despite the value that Yemenis place on land, the nation has long lacked an adequate system for managing property ownership, with up to 90% of property held informally. Moreover, nearly 85% of court disputes in Yemen today are land-related, according to Dabbas and Burns (2011). Yemen, as is the case with many Islamic countries in the developing world, demonstrates a degree of legal dualism: a pervasive and resilient body of customary law deeply embedded in broadly shared religious beliefs, social structures and culture, and a body of public law, derived from formal government action, observed unevenly in urban centers.

The country's inadequate land management system coupled with pervasive discrimination of ethnic minorities seeking to purchase property has contributed significantly to the rapid expansion of informal settlements in Yemen's largest cities, especially its capital Sana'a, since the 1980s (El-Shorbagi, 2008, Madbouly, 2008). The World Bank (2009) has reported that three groups have historically suffered from discrimination in accessing land in the nation: the Mazainah, Ahgur and Akhdam. Their inability to gain property tenure lawfully has prompted many members of these minorities to occupy land illegally in Yemen's cities, which leaves them vulnerable to the threat of forced eviction and generally also results in very poor housing quality and no or degraded access to public services and infrastructure, including potable water, sewerage systems and electricity.

This paper examines the current land management system in Sana'a by reviewing the existing academic literature and relevant government and international organization reports and documents concerning the topic. Thereafter, the paper analyzes the implications and dynamics of that property regime for the nation's principal minority groups by exploring tenure and living conditions in Mahwa Aser,



one of the oldest and most populous informal settlements in the city. The study draws upon personal interviews with the community's key stakeholders, including long-time residents of the neighborhood, responsible government officials and relevant leaders of international governmental and non-governmental organizations operating within its bounds.

The analysis suggests that the nation's nonsystematic and discriminatory property tenure and land assignment system has limited the urban poor's access to any legal housing, provided either by the public or private sector. Current property tenure, political and economic conditions have together led to worsening living situations for Mahwa Aser's residents (as well as for the inhabitants of other informal settlements in Sana'a). The paper argues that these factors have contributed strongly to the swift growth of informal settlements in Yemen during the last thirty years and concludes by outlining the compelling need for Yemeni local and national authorities to devise land policies and legal reforms that permit the nation's historically poor and vulnerable population access to formal property rights and land tenure and improved access to affordable and adequate housing.

Key words: Informal Housing, land management, access to land, Mahwa Aser, Sana'a, Yemen.

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## **Potential real estate property flipping in Mansfield, Ohio? A social network analysis**

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Housing affordability and homeownership are determined by numerous factors. On the one hand, there is the homebuyer's financial situation. On the other hand, there are house prices which are determined by supply-side factors and demand-side factors. While the supply and demand variables have been covered well in the literature, there has been a dearth of works that have looked at speculative aspects in connection with house prices (Chatterjee, Harvey, and Klugman, 1974; Harvey, 1975).

The purpose of this study is to conduct a social network analysis about real estate property flipping as a type of speculation or speculative investment which occurs when an investor purchases a property for a relatively low price, sometimes in a challenged neighborhood. The flipped property is sold back and forth (i.e., flipped) between two or more colluding investors in order to increase the property's price quickly, sometimes accompanied by cosmetic repairs. Flipping may cause a homebuyer to be stuck with a house that has a lower value than the actual sales price, property taxes that might be inflated due to an inflated assessment based on the inflated sales price, and a mortgage that might be underwater. If the house needs repairs, the homeowner might not be able to pay for them due to the inflated property tax and mortgage payments. Eventually, a homeowner may default and go into foreclosure with enormous consequences not only for the defaulting borrower, but also neighborhoods, municipalities, states, and the nation

This case study focuses on potential real estate property flipping in Mansfield, Ohio. This study is based on property transactions provided by Richland County, Ohio. Building on two previous works (Anacker, 2009; Community Research Partners and Center for Urban and Regional Analysis, 2002), in this study we undertake a social network analysis of potentially flipped properties in Mansfield, Ohio. Social network analysis is a method for analyzing the structure of relationships among social entities through networks and graphs (Wasserman & Faust, 1994). We look at how properties, homebuyers,

home sellers, and mortgage lenders relate to teach other. This study utilizes social network analysis conducted in UCINET software, a commonly used software for visualizing social networks and undertaking social network analysis.

We use social network analysis to analyze the network topology and centrality of mortgage lenders and buyers in Mansfield, Ohio. Consistent with preliminary analyses (Knoke & Yang, 2008), we find that potential real estate flippers operate in cliques. Moreover, we find that the network is highly fragmented, i.e., there are several disconnected components. Some of these components represent a relationship between one mortgage lender and one home buyer, while others are larger and more complex. Surprisingly, we also find that national mortgage lenders have relatively few borrowers. To gain a richer understanding of the structural properties of the cliques and the relative prominence of lenders and buyers within and across cliques, we draw upon four indicators of centrality: indegree, outdegree, Betweenness and closeness.

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## **Housing Safety and Functionality In Climate Change: Perspectives from Nigerian Coastal Areas**

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Functional and safe housing for families is one of the basic needs for human survival. As the largest black nation, Nigeria has about thirty percent of her citizens living along the coasts where the apparent effects of climate change - increase in frequency and intensity of storms, changes in rainfall patterns, soil aggravation and coastal erosion are predominant. This paper investigated housing conditions in the coastal areas with the objective of finding out the effects of design, climate change and the environment on vulnerable households in order to make appropriate recommendations for mitigations.

Interviews were conducted on 450 samples 90 each from Apoi, Ilaje, Egun, Esan and Itsekiri areas using the local dialects to forestall educational backgrounds from hindering adequate responses. The interviews were conducted on three different market days in each of the areas. Data were analyzed using simple frequency counts, percentages and ANOVA to find out similarities and differences in the situations of respondents.

Results showed that only thirty-five percent and eighteen percent of respondents had up to Primary school and basic education, thirty- two had no formal education. Eighty eight percent of the samples were fish farmers and peasant farmers. Over seventy three percent lived in 'stilt' houses made of bamboo, planks and raffia leaves without approved building plan. None of the houses had potable water supply or toilet facilities- inmates defecated into the 'flowing river beneath the stilt houses'. Seventy three percent of houses had doors and windows with woven raffia and polythene sheets as curtains, none of the houses had a standard kitchen-the fire-place used for fish roasting at the bank of the river doubled as kitchen/relaxation area at daytime. Sixty four percent of the families had up to 7 children living within room spaces that were less than the 23 cubic meter standard required for fresh air per person. Seventy nine percent experienced frequent outbreak of diseases and infections, diarrhea, cold, flu with high manifestation of kwashiorkor and marasmus. Only twenty three percent of respondents visited the public Health Center situated about six kilometers from the settlements.

The ANOVA table at 0.05 level of significance confirmed the rate of disease outbreak to be at f-

cal 82.78 and t-cal 9.26, while availability of public health facilities had f-cal 56.78 and t-cal 11.26, public schools had f-Cal 27.94 and t-cal 11.26 respectively.

The paper concluded that undesirable lifestyles in the areas were complicated by uncontrolled birthrate, inadequate education, poverty and climate change implications in the presence of poor housing designs. The paper recommended that:

2. A national council on coastal housing development be established and sited in coastal areas for improved and sustainable lifestyles for the populations.
3. All issues emanating from climate change be treated as national disaster with adequate palliative measures provided for vulnerable groups
4. Rural/coastal communities be provided with adequately staffed public schools and hospitals with effective family planning facilities, safe water supply and electricity to mitigate against poor education, hazardous environment, uncontrolled birth rate and resultant health issues.

Key Words: Housing Design, Health, Environmental Safety, Coastal Areas, Mitigations

## **Sustainable living education for low-income homeowners**

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Homeowners face an ever increasing need to evaluate and conserve resources due to economic insecurity and environmental sustainability. Through talking to other professionals in the field and conducting internet searches, it is clear that although extensive information concerning sustainable living is available through online sources few people in the target audience are accessing this information. Those families with limited resources, as well as older homeowners, often cite the lack of access to computers, or lack of familiarity with technology as being a problem with obtaining information through internet sources. Many homeowners are unaware of how their everyday behaviors and decisions impact their energy consumption, family budget, and overall health (6,7). Many consumers may also be unaware of environmentally friendly choices, and have little or no knowledge about how to evaluate the life cycle cost of a product (3). Helping consumers understand how to evaluate products, where to look for information, and how to use that information can result in better investments and cost savings to consumers, as well as a healthier environment (2,4,5,8).

Through a funded grant (1), Workshops were developed to educate homeowners concerning how their decisions impact energy consumption, indoor air quality, water quality, and waste management. Workshops targeted lower income neighborhoods and included homeowners identified through Habitat for Humanity and the Department of Housing and Urban Development. Over time the scope expanded to include middle-income homeowners, non-homeowners, and people in temporary group housing. Local and state agencies were invited to participate in the workshops to provide information on government programs that reduce energy, water usage, and waste. A website with tutorials is underway, but due to the amount of information already available on line, and the lack of access or use of that format, focus is shifting to provide these tutorials to extension specialists that can deliver them to the communities they serve. Presentations have also been adapted for elementary and middle school students in an effort to broaden the impact of the workshops.

The workshops offered a holistic approach to addressing sustainability issues. Presentations on current environmental concerns, best practices in waste management, energy conservation, water quality and conservation, and indoor air quality were delivered and discussed. Participants were given a folder with information on recycling locations, composting, healthy air plants, and steps to a more sustainable lifestyle. They also received cloth bags containing CFLs, power strips, and environmentally friendly cleaners to assist them in developing more sustainable practices. At the end of the workshop participants completed surveys indicating their current sustainable practices and practices they felt they would develop following the workshops.

Since the inception of the project, over 325 individuals have participated in the workshops. While response rates on follow-up phone surveys have been low, immediate response to the workshop information and delivery method has been extremely favorable. Informal post-workshop feedback consistently has shown an increase in recycling practices and residential energy savings among the participants.

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## **Teaching environmental sustainability in housing through engaged learning**

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Today's students depend on technology as a learning source, and have become programmed to process information through visual and interactive processes, rather than traditional lectures. Research demonstrates that engaged learning not only increases student knowledge retention, but creates transformative learning where students demonstrate growth in understanding, values, and commitment typical of mature cognitive development (1, 3). "Service learning is a uniquely important educational intervention because it involves students, faculty, and curricular revision that can have an enduring presence on the campus and in the community" (2). Engaged learning, when combined with technology that emphasizes visual images related to lecture content, greatly increases the student's ability to process information and develop a fuller understanding of subject matter.

In a USDA funded project, Family and Consumer Science students developed a series of interdisciplinary teaching modules to target consumer knowledge and practices related to sustainable living. In the initial phase of the project, students in Design and Parenting courses gathered and evaluated information on sustainable environmental consumer practices related to their area of concentration. Students in a design class researched information related to: forestry products, recycling, household chemicals, landscaping, food choices, and household textiles. Information covered the environmental, economic and human impact of various consumer choices on individuals and families. Research questions included information on carbon footprint created in manufacturing and shipping of goods, waste production and management, and water use and impact on water quality. Findings were disseminated in Power Point presentations and "fact sheets". Students in a parenting course used that information to create learning modules to educate families about the issues and promote best practices.

These courses were used again during the second year of the project to incorporate additional learning experiences through hands-on design projects. In this portion of the project, students designed a new product from materials that are considered waste or trash, while researching the environmental

impact of the original product, including manufacturing, life cycle cost and disposal. Through participation in these service learning activities, students gained experience translating academic knowledge about the environment and resources into recommendations for behavior change on an individual level. Information gathered by the students during each phase of the project was incorporated into presentations being delivered to the community through Sustainable Living Workshops. These workshops feature Power Point and poster presentations, examples of consumer goods that reduce water and energy consumption, and products and practices that affect indoor air quality, both positively and negatively.

During the course of the grant, over 300 students participated in the project in one or more courses. The students involved in the project rated the experience positively. Students reported learning information that they can use in their own lives, making them consider their own consumer behavior more. As future professionals, it is important that students within Family and Consumer Sciences disciplines are able to integrate knowledge regarding sustainability within their area of academic concentration and relate relevant concepts to others. By using engaged learning strategies, both community and students benefit by meeting learning objectives through community education.

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## **Housing satisfaction and the rental housing search process of veterans with disabilities**

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### Introduction

Veterans with disabilities who rent housing are in a precarious situation. Many encounter stress during the search process and experience dissatisfaction with their housing, especially, when considering their disabilities in relation to their housing conditions and needs (Institute for Policy & Governance, 2010; U.S. Department of Health and Human Services, 2010). Veterans' disabilities are often severe, requiring housing environments that are designed or modified to meet their needs. They may have income limitations due to difficulties finding employment and they may not be receiving disability benefits due to a backlog of applications that has significantly slowed the process for obtaining VA benefits (Iraq and Afghanistan Veterans of America, 2013).

### Purpose and Rational

The purpose of this study was to investigate the housing search process and housing satisfaction of veterans with disabilities. Satisfaction with housing may be related to quality, neighborhood, costs, size, structure type, and accessibility. Since these veterans are renting they are in non-normative housing and their disabilities indicate that they may have special needs and face discrimination.

### Methodology

Data were collected using a mixed-mode survey design of self-administered online questionnaires and interviews. Eighty-three useable responses were collected using convenience sampling techniques, such as online distribution through national veterans organization and booths at veterans job fairs. Descriptive analysis presented respondents' demographic and military characteristics, housing search process, and current housing.

One-way ANOVA and *t*-test were used to analyze relationships between these variables and

overall housing satisfaction. Because of the sample size and the use of convenience sampling, the p value was set at  $< 0.10$ .

### Findings

Typical respondents were male (83%), between the ages of 18 and 40 (48%), white (49%), unmarried (68%), with less than 4 years of college (73%), not working (68%), and with household incomes of less than \$29,999 (54%). The majority of the respondents served in the Army (52%), in support of the Afghanistan and Iraq conflicts (54%), and reported having mental health conditions related to their military service (68%). Many respondents (43%) indicated that they expected to have difficulty finding housing that met their disability needs. Eighteen respondents reported experiencing housing discrimination. Nearly half of respondents (48%) indicated living in multifamily housing. They were moderately rent burdened (49%) or severely rent-burdened (35%). A large portion of respondents indicated having two bedrooms (41%). Common accessible features included wide doors (37%), reachable controls (37%), clear pathways (36%), and useable kitchens (34%). Most respondents (76%) indicated their housing did not require modifications to meet their disability-related needs. Overall 54% indicated being satisfied with their current housing.

Veterans with disabilities are more likely to be satisfied with more bedrooms ( $F_{2, 75} = 2.590, p = .082$ ) and with more accessible features ( $F_{2, 77} = 7.577, p < .001$ ). Those who did not expect to have difficulties finding housing ( $F_{2, 76} = 2.723, p = 0.050$ ), who knew more about their rights under Fair Housing ( $F_{4, 74} = 4.888, p = 0.001$ ), and who had been in the military longer ( $F_{2, 77} = 2.924, p = .060$ ) were more likely to be satisfied with their current housing. Individuals who experienced discrimination reported being less satisfied with their current housing [ $t(77) = -2.446, p = .017$  (two-tailed)].

### Conclusions and Implications

For veterans with disabilities, having accessible space is critical for the usability of their housing. The associations between low expectations, housing discrimination, and low satisfaction may be due to a realistic assessment of the difficulties of the housing search process, the availability of housing, and the compromises that have to be made. Better education about searching for housing, including education

about discrimination; rental subsidies; and funds for modifying rental housing are policy changes that could help alleviate the difficulties veterans with disabilities face in the rental housing market.

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## **Teaching collaboration: Architecture and housing studies**

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We are often challenged by our own teaching philosophies and by our external partners to provide learning experiences that enable students to work in teams and across disciplines on real-world problems. Logistics, however, can be impediments to effectively implementing such opportunities. Last year, faculty who had been working together on a related research project decided to join forces in their teaching and overcame the impediments and persevered to make such a teaching opportunity happen. A housing studies course collaborated with seminar and studio courses in architecture for students to work in teams to produce the design and the development proposal for a “net-zero” Habitat for Humanity townhouse development.

The courses were regularly scheduled in the curriculum and had explicit learning objectives to be achieved each year. Students in the architecture seminar were to focus on the parameters of net-zero (energy used is generated on the property site) and develop schematic designs by mid-semester. Students in the graduate architecture studio then were to revise the designs and complete the construction documents. Students in the housing studies course were to write a development proposal outlining the theme of the development, the market area analysis, the financial pro forma, the entitlement process, and the marketing plan for the housing development.

The collaboration resulted in some changes in delivery of content and new opportunities for students. Because the courses were taught in classrooms about five miles apart and the 75-minute course periods overlapped for only 45 minutes twice a week, we utilized Skype® for presentations. We made use of the students’ backgrounds and interests so that they could share knowledge across their disciplines. Housing students made four presentations: 1) housing needs of low- income families; 2) unique needs of first time homebuyers; 3) benefits and responsibilities associated with homeowner

associations; and, 4) marketing approaches for sustainable housing. Architecture students made a presentation on aspects of net-zero design applicable to the site. The teams of housing students and architecture students met to discuss the designs; the purpose of this critique was for the housing students to advocate for the future residents' needs.

A small grant from the Institute on the Environment at the University supported a field trip to the site, printing of posters, and an end-of-semester reception. The reception provided an opportunity to share the students' work--design concepts, schematics, construction documents, development proposals, and posters to explain the development with college leadership and community partners. The faculty learned much from the collaboration. From the perspective of the housing faculty, our students gained understanding of the design process and how to work with architects as housing is designed. The architecture students were exposed to a set of broader issues that influence the design and development of housing. Everyone learned about the design and development process when working with a non-profit. We hope to repeat the opportunity again next year with another non-profit developer of affordable multifamily rental housing.

## **Homeownership Drivers in the Post-Housing Bubble Era**

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### **Research Rationale**

Since 2008, homebuyers have competed for a smaller share of available mortgages that are typically only available to those with a credit score of 680 and above (Clark, 2013). This market constriction prompted us to quantify drivers of home buying that motivated US homeowners to choose a home since then. Thus, the rationale for conducting this research is to offer profiles of post-2008 homebuyers as a way for explaining why similar houses in similar areas are bought and sold while others remain on the market.

### **Research Objectives**

We endeavored to quantify homebuyer preferences since 2008 in order to offer a method for categorizing the importance of homeowner purchase drivers. This enabled us to profile homeowners according to what motivated them to choose the home they did.

### **Methodology**

A proprietary survey sampling company was paid to randomly invite a representative sample of U.S. households to participate in this study according to the three criteria: ages between 25 and 50 to capture variation related to the majority of activity in home buying and selling, purchased a home since 2008 to capture variation in post-bubble purchase drivers, and had a minor(s) under the age of 19 living in the home to capture variation in age-related issues (e.g., schools). Thus, according to these criteria, the required sample size was determined to be 400. IRB approval was secured in January of 2012, and a web-based questionnaire used to rank home-purchase drivers based on the participant's most recent home-buying experience was distributed in February of 2012.

The survey asked questions about demographics, the impact local schools had on the purchase



decision, the impact of community (i.e., non-neighborhood questions) and neighborhood variables, and the influence that the home itself (interior and exterior) had on the purchase decision. Items were ranked by mean values and broken down into six common homebuyer themes: neighborhood quality, school quality, impacts based on the first impressions of the home's i) exterior and ii) interior, and impacts based on the specifics of the home's i) exterior and ii) interior. These six themes were further refined into the four groups: neighborhood quality, school quality, home exterior details, and home interior details. Demographics were also used to describe purchasing groups.

## Results

When observing each item in rank order, the most influential factors in the home-buying decision were evenly split between community (i.e., schools and public services) and neighborhood (i.e., housing subdivision items and those related to the home). The data showed that there are five universal purchasing drivers that are found across all four homebuyer groups, followed by each group's distinctions (i.e., purchase drivers unique to each of the five homebuyer groups). Because housing credit markets have tightened since 2008, those who continue to qualify for mortgages have differing needs that motivate their home purchase. For instance, those who are highly focused on the quality of the neighborhood (i.e., housing subdivision) are also highly impacted by their first impression of the home's exterior, whereas those highly focused on the quality of local schools are quite sensitive about the finer details of the home. Those who are highly focused on the home's exterior details are also quite impacted by their first impression of the home's cleanliness and organization, and those who are highly focused on the home's interior are impacted by little else.

## Conclusions

By understanding the profiles of potential clients, members of the Realty Industry can adjust their marketing and sales strategy accordingly, enabling them to emphasize to potential buyers those characteristics that are most impacting to that buyer. Similarly, sellers can be counseled on how to stage their homes so they appeal more to a certain profile of buyer.

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## **One affordable housing model, two communities: A case study of two CLTs**

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Community land trust organizations, or CLTs, are non-profit corporations that help alleviate affordability concerns on the part of first-time home buyers through a unique arrangement. In this format, the CLT owns the land upon which the housing unit rests, and the organization and the participating household engage in a shared equity arrangement once the house price appreciates over time. As such, it is an example of an alternative tenure form of housing that lies somewhere between traditional renting and ownership. Because of its public and community purpose, the CLT format is becoming an established source of affordable housing in communities throughout the United States and abroad. Nearly all CLTs are structured as non-profit organizations with 501 (c) (3) tax-exempt status (Thaden, 2012).

Like non-profit housing organizations in general, CLTs vary in size, service area, populations served, inventory and annual production. Operating within their local communities, CLTs differ in the objectives they are trying to achieve and the funding and policy environments in which they are operating (Federal Reserve of New Richmond, 2012).

Despite their growing importance as a way of achieving housing stability for low- and moderate-income populations, there is little research on CLTs as a whole. The purpose of this paper is to explore how local governments and agencies shape CLT organizations and their housing inventories, as well as examine household characteristics of CLT homeowners.

The research uses a case study approach to examine two CLT organizations, using data collected from a study conducted on 20 CLT homeowners from the two organizations, Athens Land Trust in Clarke County, GA and Community Home Trust in Orange County, NC. The study of CLT homeowners used a mixed-method approach, which included collection of data on participants' housing in the five years prior to becoming CLT homeowners. The researchers also collected data on the various CLT homes as well, including questions about transportation and affordability. The research also included a series of open-ended, qualitative questions about CLT clients' housing and experiences as homeowners

within the program. Data were collected during a single interview, which took about one hour and was recorded with the participant's permission.

Athens Land Trust and Community Home Trust share some common locational characteristics, in that both are located in the Southeastern United States in cities that are home to a large university and within metro counties of similar population size (USDA, 2013). Both CLT organizations are located in areas that face problems of housing affordability for both renters and homeowners. However, the two organizations are operating in entirely different markets. Community Home Trust is located in Orange County, NC, which has higher median home values and income and lower rates of poverty than Clarke County, GA where Athens Land trust is located. Orange County also has a higher rate of homeowners (60.2%) when compared to Clarke County (45.6%), which has more renters than homeowners (U.S. Census, 2013).

The findings of the study point to two CLT organizations with markedly different inventories and which serve different populations. Community Home Trust is located in a city with inclusionary zoning policies, which has helped the organization achieve an inventory of over 200 owner-occupied units, compared to Athens Land Trust's 20 owner-occupied units. Interview results suggest that each CLT had beneficial and lasting effects for the communities impacted, and that it tended to provide stability to those who were accustomed to constant moves or possibly inadequate quality housing. Additionally, different demographic, housing market and policy environments serve as potential drivers for non-profit housing services and capacity.

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## **Reality-virtuality continuum and the place of the designer: Designing with digital media**

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A number of studies have focused on using digital technology in architectural and interior design, giving consideration to implications in education (Kvan, Mark, Oxman, & Martens, 2004; Oxman, 2008; Al-Qawasmi, 2005), research (Dahley, Wisneski, & Ishii, 1998; Bilda, & Demirkan, 2003) and practice (Iwamoto, 2009; Sass & Oxman, 2006). This paper provides a narrative of some explorative exercises which uses digital tools in design education and research while developing a theoretical framework for using them in design practice.

This paper builds upon the existing body of knowledge on the use of digital tools in design that provides examples of improving efficiency, accuracy and coordination of design realization (De Lapp, Ford, Bryant, & Horlen, 2004; Kvan, 2001; Wojtowicz, 1995; Kim & Maher, 2008) and improving of human skills such as spatial intelligences (Kaufmann, 2005; Dünser, Steinbügl, Kaufmann & Glück, 2006). While describing several exercises in using digital media in design and design education, the paper discusses their connections to creativity, fixation and cognitive load in digital interfaces.

Milgram and Kishino (1994) introduced the Reality-Virtuality continuum to explain the concept of Mixed Reality and the media spectrum that spans across physical space to Virtual Reality (VR). This paper uses this continuum to discuss the different characteristics of digital media through Virtual Reality (VR) and Augmented Reality (AR) and the implication of differences in their characteristics such as controllability, interface transparency and cognitive load to design.

This study looks at the use of digital tools within the Virtuality-Reality continuum by first focusing on VR. The potential of using VR is explored in practice, teaching and research by discussing exercises conducted using unity 3D simulations, Virtual Critiques, and parametric design and energy simulation digital tools in design studio II at the University of Missouri-Columbia. In discussing AR, the study first discusses how AR was used in some of the teaching and research exercises and then focuses on the implications of using it in design. The study further elaborates on the use of AR for digital design models through a narrative of how students at the University of Missouri have used it in their design projects, and

their learning outcomes. While providing case studies for using the digital medium in design and design education, the discussion on each of these techniques focus on developing a theoretical framework for using such tools in design.

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## Teaching Housing in a Global Perspective

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We live in an increasingly complex and interconnected world. It is important for us to recognize and understand the complexities and the interconnection of global issues and concerns that exist between different cities and countries. As a result, teaching a global perspective has become more apparent and significant in the classroom. A global perspective helps students not only to have knowledge of different perspectives but also to understand global responsibilities and issues such as conflict, poverty, and discrimination.

It is understood that housing is an essential factor to consider when studying the phenomena of cities and countries because “Housing is the interaction of places, people, and processes within a context of demographic changes, environmental situations, economic realities, and political processes” (Ziebarth, 2009, p.137). A global perspective can be used in a comparative framework to analyze housing phenomena and housing outcomes between nations. In addition, a global perspective can be applied to solve local housing problems. Ziebarth (2009) explains specifically how the perspective impacts local housing issues. Therefore, housing educators should be obligated to introduce students to engage in a global perspective.

It is challenging to teach housing from a global perspective in the classroom. First, there is still a shortage of analyzing forms and educational materials (Carswell, Delgadillo, Ziebarth, & James, 2011; Lawson, Haffner, & Oxley, 2010). Housing has evolved its own performances and practices over times regionally. As it has evolved, housing terms have often come to be used differently from country to country. It is true that instructional and educational materials about a global perspective in housing are yet underdeveloped. Second, beyond these different forms and the lack of materials, an additional challenge to a global perspective in housing lies in the nature of housing. Housing is socially constructed by the experiences of people, places, and era. Housing experiences become a framework that shapes housing assumptions and norms. The experiences may act as filtered lenses that can promote or interfere with

understanding, appreciating, and comparing (Calder, 2000).

This presentation is aimed at addressing a need for embracing a global perspective in Housing Studies. This presentation will share reflections of a class since 2010 that aims at developing “a better understanding of the linkages among demographic changes, economic conditions, and public policies for housing around the world” (Ziebarth, 2010, p.1). Focusing on low-income populations, the class introduced different norms, demographic changes, government schemes, and housing responses in non-U.S. countries. This was challenges to the students, and would give deep knowledge to them in terms of understanding of various perspectives and issues and learning comparative analysis skills. The authors also will share the experiences of cross-cultural research. The presentation will conclude that housing educators should encourage students to engage with a global perspective. In order to do so, the authors also recommend housing educators should involve with more cross-cultural research. Furthermore, the presentation will suggest a “Glocal” perspective, one that has newly appeared in academia such as education, business, and social work (Brooks & Normore, 2010; Hong & Song, 2010).

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## **The Built Environment and Walkability for Older Adults: Literature Review**

Cara Davis, Virginia Tech

Eunju Hwang, Virginia Tech

### **Purpose**

There is a growing body of literature on the influence of the built environment on walking; however, much of this work focuses on children and their families. In an effort to characterize the link between the built environment and walking for older adults, the goal of this study is to review existing literature on walkability for older adults. The study seeks to determine key attributes of walkable environments for older adults.

### **Methodology**

For the literature review, we used the Virginia Tech Library, AgeLine and Factiva databases to search online scholarly journals between 2005-2012. We used key words such as walkability, age-friendly, livability, and complete streets and relevant materials were also selected by the authors through examining references in review articles. These existing studies were included if they met the following criteria: quantitative research design, exclusively older adult (age 50+) sample, and assessing the association between one or more aspects of the built environment and walking behavior. In total, 12 articles were included in our review. Our review sought to extract and compare important key attributes of walkable environments for older adults.

### **Findings**

Great variation exists in built environment characteristics measured, ranging from land- use mix and street connectivity to green space, business within walking distance, access to public transportation, housing density, and aesthetic variables. Land-use mix is the dispersal of residential, community, service, and retail zoning. It permits travel between multiple destinations and home and would better support residents of neighborhoods in leaving their car at home and walk to their needs (Rosenthal, 2009).

Interestingly, increased land-use mix, high street connectivity, high density of public transit stations, and green and open spaces are positively associated with walking (Friedman et al., 2012; Li et al., 2008; Weiss, 2010). Street connectivity and maintenance advocates for the shortest and well-kept routes for older adults in communities to take to their desired location.

Aesthetic features are essential for walkable environments. Memorable landmarks and parks contribute to attracting walk and wayfinding for older adults (Walford et al., 2011). Non-attractive features include excessive trash or litter, graffiti, neglected or abandoned structures, and poor street maintenance and these are seen as signs of criminal activities which discouraged walking and going outside for older adults (Shendell et al, 2011).

Finally, another crucial aspect for a walkable infrastructure is pedestrian safety. Safety features which can be readily applied are elements, such as shorter crosswalks with good markings and signals, a green space buffer between the pedestrian and traffic, wider well maintained sidewalks, and specific bike lanes (Shendell et al., 2011; Walford et al., 2011).

### Conclusion

Many built environmental factors are associated with walking outcomes in older adults. However, many of existing studies are still descriptive and they rarely involve theoretical backgrounds. To gain a better understanding of how the built environment affects walking for older adults, more comprehensive and theoretical approach is needed.

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**Real estate professionals' contributions to improve and evaluate  
housing counseling programs in Utah**

Lucy Delgadillo, Utah State University

Jordan Aaberg, American First Credit Union

The purpose of this research study was to collect feedback from Realtors in order to improve housing counseling workshops offered by a non-profit HUD approved housing counseling agency. Real estate professionals could be seen as very valuable, non-evaluator stake holders, who could be essential co-participants in either motivating the public to get educated about the home buying process, or in discouraging clients from becoming informed, in view of the fact that such information asymmetry may benefit the real estate agent (Levitt and Syverson, 2005).

The framework that guided this paper was evaluation program theory as presented by Bamberger, Rugh, and Mabry (2006), and by Cousins and Earl (1992). Surveying Real Estate agents would bring forth additional information useful in improving the implementation of first time home buyer (FTHB) workshops and in increasing the credibility of a counseling agency efforts, at least at the local and regional levels, and concomitantly increasing the chances of getting funding.

**Sample**

The sample for this study was defined to be Realtors belonging to the Cache and Rich counties Association of Realtors (CRAR) in Utah. There are approximately 320 member Realtors in the CRAR. To increase the reliability and validity of the research findings, simple random sampling was used. From the membership list 250 subjects were active. A total of 226 surveys were successfully delivered via email to eligible Realtors; 24 email addresses came back as "undelivered"; and only 66 responses were received for a response rate of 29.2%. Data for this study was collected using an online survey company.

Research questions included open and closed ended responses and they were analyzed using IBM SPSS 20.

- To what extent did Realtors who responded to the survey think that FTHB workshops offered in the area were useful?
- To what extent did Realtors who responded to the survey agree that FTHB workshops should be mandatory?
- What kind of problems and issues arose for FTHBs during the home buying process?
- What were the most common recommendations given by Realtors to better prepare FTHBs for homeownership?

### Results

Providers of homeownership education can take into consideration the findings when evaluating their workshops to identify “best practices” that would improve FTHB education effectiveness, and establish educational programs that help FTHBs make more wise financial decisions for themselves and their communities (Lyons, Palmer, Jayaratne & Scherpf, 2006). Considering the impact of the 2007-2008 financial crisis, more people may be looking to government-sponsored home ownership programs to help them achieve their housing goals (Memken & Niemeyer, 2010).

### Conclusion/Implication

Although these alternatives provide affordable housing and incentives for FTHBs, it is important that FTHB workshops separate federal, state or local level grants and specific loan program presentations from purely educational workshops that will help FTHBs make educated home purchasing decisions. Providers of educational programs should consider non-evaluators main stakeholders in the implementation, delivery, and evaluation of their program's effectiveness in educating the public about home buying issues.

### Sponsorship

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## **Financial skills and strategies for saving for a home used by individual development account holders**

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Lindsey Cady, Utah State University

Homeownership is regarded as a major beneficial means of saving and asset accumulation (Grinstein-Weiss, et al 2010); yet many low-income individuals frequently face numerous challenges in obtaining homeownership. Individual Development Accounts (IDA) are tax-protected, matched savings accounts designed to help those with low incomes and few assets buy a home, capitalize a business, or fund post-secondary education. Savings is a critical component of homeownership, especially for low-income individuals who have historically saved at lower levels. The main objective of this study was to assess financial skills and saving strategies by IDA holders, and to identify how they fare in regard to housing affordability.

For purposes of this paper, housing affordability goes beyond a simple ratio of housing costs to income. Some scholars argue (Kutty 2006; Stone 2006) that the commonly used housing affordability ratio may not be sufficient to reveal the degree of deprivation of other non-housing necessities a household experiences after paying for housing. Affordability, as defined by Stone, “expresses the challenge each household faces in balancing the cost of its actual or potential housing, on one hand, and its non-housing expenditures, on the other, within the constraints of its income” (p. 151). In an attempt to more accurately measure housing affordability, we designed two survey questions to capture affordability as an alternative to the ratio approach.

### **Methodology and Research Questions**

The sampling frame for the RQs was all the IDA graduates who saved to purchase a home. First, an email with the invitation to participate in the survey and a link to the online survey was sent. Two weeks later, another reminder email was sent, and one last email was scheduled about four weeks after the first contact. Descriptive statistics were used to provide a profile of IDA-homeowner in terms of

financial measures, financial skills, savings strategies and housing sustainability. Research questions are:

1. How often do they use the financial skills they learned in the IDA program, and what kind of saving strategies did they use while enrolled in the program?
2. How do they fare in regard to housing affordability?

## Results

When IDA graduates were asked to report their financial skills, 70% reported an 8 or above on a scale of 1 to 10. Eighty-five percent of participants reported using the skills learned in the IDA program frequently or almost always. Eighty-four percent of graduates restrained consumption in order to increase savings. More than 50% postponed major purchases and lowered the quality of consumption to increase savings. Only 7% of participants felt it was difficult to pay their mortgage on more than one occasion, which means that 93% felt that paying the mortgage was not at all difficult. After paying the mortgage, only 4% of participants felt they did not have enough money to pay for other non-shelter necessities. Implications: Housing counselors and housing practitioners are in a position to better educate individuals who have enrolled in an IDA program and clarify an individual's ability to afford a given mortgage or rent.

## Sponsorship

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## **Socially constructing homeownership: Content analyses of media and presidential statements**

Rachel Drew, University of Massachusetts Boston

Homeownership has long held a privileged position in the United States. From Jefferson's idyllic 'yeoman farmer' through Bush's 'ownership society', many policymakers have encouraged property ownership as a means to better social and economic outcomes for individuals, families, and communities, while media and popular press sources simultaneously extolled the many virtues of owning in print, film, and song (Wright, 1983; Shlay, 2006; Vale, 2007; Lands, 2008). Several scholars have asserted that this constant and consistent promotion of homeownership has fostered a social construction of owning as the preferred, natural, and expected tenure for all American households (Ronald, 2008; Dickerson, 2009; Saegert et al, 2009; Drew, 2013). Surprisingly, however, there has been little empirical research to support such claims, and to detail the specific benefits of homeownership that liken it in American society to "a political right seemingly more popular than voting" (Shlay, 2006, p.511).

This study seeks to fill this gap in our collective understanding of the social construction of homeownership and its manifestations in public discourse. Using ethnographic and quantitative content analyses (Krippendorf, 2004; Altheide et al, 2006), this research examines two sources of messages about homeownership received to the American public during the 20<sup>th</sup> and early 21<sup>st</sup> century. The first is a selective sample of media and popular press sources with over 250 news articles, movies, books, songs, and poetry produced and published for mass distribution between 1900 and 2012, collected primarily from online databases and public library collections, and containing over one thousand individual messages about homeownership. The second source is a comprehensive collection of all public statements made by American presidents from Hoover to Obama, including over 435 normative references homeownership and its benefits. Combined, these sources reveal a wide range of outcomes associated with homeownership that were communicated over this period and helped foster a social construction of homeownership as the preferred housing tenure option for all Americans.

Preliminary findings from these analyses indicate that, despite the large number of benefits associated with homeownership identified in these media and political statements, a few themes appear

to have dominated public discourse. These include benefits for children and families, opportunities for investment and asset development, increased independence and control over living arrangements, and achievement of the 'American Dream'. Moreover, the majority of messages identified were related to lifestyle and personal outcomes associated with owning, rather than financial and societal benefits. Finally, while some themes occur more frequently in certain decades, reflecting the social and economic conditions of the time (i.e. homeownership linked to savings and thrifty behavior during the Great Depression), there is also considerable consistency of messages over time, with certain images and associations recurring throughout the study period. These findings lend support to the proposition that a set of beliefs about homeownership and its benefits has been socially constructed through the repetition and language of these messages, which in turn may influence individual preferences for owning and renting housing.

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## **Shared housing: The Balinese compound house as model**

Gregory Galford, Chatham University

The Balinese compound house is a series of small homes with pavilions arranged around shared outdoor spaces set within a perimeter wall. It is constructed according to established guidelines that reflect a broader view of Balinese religious and family structure. It is facing economic and societal pressures in a globalizing world. It is architecturally evocative, but is often used by Western designers only for its allusion to a particular style based on culture and place.

This presentation is a review of the literature surrounding the Balinese compound house as a means to establish a broader research study. The goal of this presentation is to utilize that literature review as a way to decide upon the research design of the subsequent study. A literature map will be produced and presented.

The questions that are to be addressed currently are looking at the compound house as a tool to establish a unique dialogue with housing design in the U.S. The ultimate research objectives are to investigate whether an understanding of that particular housing style provides relevance for housing designers in America. In a globalizing world, most of the influence moves from the globalized to the globalizing, but future research will investigate whether models can be established that utilize information in the other direction.

The questions to be addressed are:

- What are the economic and social forces affecting the compound house?
- Does the Balinese compound house model prove relevant to housing design models and trends in the U.S.? If so, how?
- How can this knowledge advance American housing design?

The methodology for this work will be qualitative in character. Quantitative data may be used, but in support of the qualitative methods. The research procedures for the ultimate study have not been established. The author has made four visits to Bali, and has established research ties with faculty at a local university. Particular case studies may be utilized, as well as interviews and observation. The

purpose of this review of the literature and the presentation is to begin the process of research design that will establish those procedures.

The expected implications for this literature review and presentation are that the particular questions that are to be addressed will be modified and clarified. This will be done with a focus on utility and relevance for future U.S. housing design research.

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## **Creation of an interdisciplinary real estate major: Challenges and opportunities**

Rosemary Carucci Goss, Virginia Tech

Over the last half century the real estate industry has evolved “from a local, founder-based, cottage industry to a national and global provider of team-based asset and service solutions.”(Lee, 2012) In an attempt to meet these changing needs that have become even more apparent since the real estate crash of 2007, Virginia Tech faculty, top-level administrators, alumni, and industry professionals have worked together to develop a comprehensive, interdisciplinary, academic program that transcends college boundaries while building on existing strengths in the areas of building construction, business, economics, engineering, law, planning, and property management. In addition to discussing the involvement of the housing program in this new degree, this presentation will examine the challenges and opportunities that shaped the development of a unique undergraduate interdisciplinary degree that includes six colleges—Architecture and Urban Studies, Agriculture and Life Sciences, Engineering, Liberal Arts and Human Sciences, Business, and Natural Resources and Environment.

The challenges to developing this new major were many, and included issues such as an attempt to start a new major in a climate of reduced university funding, facilitating an agreement among eight college deans to accept the idea of a new major, and then obtaining agreement from the six participating deans to share resources. Overcoming “turf” issues and educating university faculty, the board of visitors, and members of the State Council on Higher Education in Virginia (SCHEV) regarding the scope and value of the degree was another challenge. Journals such as the *Journal of Real Estate Practice and Education* frequently report on graduate real estate education; however, fewer articles can be found that pertain to undergraduate programs. The fact that none of the existing undergraduate programs across the United States included any housing-related courses in their real estate curriculums presented a specific problem for the housing program at Virginia Tech—how could we make the case for inclusion?

The development of a small, cohesive and committed faculty team (one representative from each of the six colleges), networking with other real estate education professionals, and support and funding from alumni and industry were instrumental in overcoming these challenges. The new major was

approved in May 2013 after three years of intense work by faculty and administrators. The first students were admitted to the program in Fall 2013.

Although the real estate program was perceived as a potential threat to reducing the number of housing and property management students within our department, we knew we needed to be involved from the beginning in order to make sure we were not left out of the new major. (Two property management courses had been included in the existing real estate minor.) Support from the dean was secured early in the process. The final real estate major included two required courses from the property management area and five additional courses were included as controlled electives (two from property management and three from housing). Enrollment in these courses has the potential to increase dramatically. Although the impact of this new major on the housing program is yet unknown, we knew it was in our best interest to be an active “player” in the development of the new major.

The presentation will conclude with an update of the new major’s impact (measured by course enrollment and changes in the number of students in the property management option within housing) thus far. Recommendations for how housing programs can take advantage of campus-wide interdisciplinary opportunities will be presented.

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## Retirees Moving to Jeju Island, Korea

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Julia Beamish, Virginia Tech

### Purpose

Often tourist destinations become locations where retirees choose to relocate. Jeju Island in Korea has experienced a huge influx of retirees in recent years. While many previous studies on move were built on conventional approaches to permanent move (e.g., Bloem et al., 2013; Fonad et al., 2006), we have yet to compare the characteristics of permanent movers to temporary movers among retirees. Thus, the purpose of this paper is to examine the characteristics of retirees moving to Jeju Island and compare permanent and temporary mover's perception on a sense of community and general satisfaction living in Jeju. The permanent movers are defined as the persons who have registered their permanent address in Jeju after moving and the temporary movers are defined as the persons who have not.

### Methods

This study used the sub-sample of baby boomers and retirees' project in Korea. The data for the original project were collected from Korea in 2012 and for our study, we used the sub-sample collected in Jeju Island. The participants of the sub-sample (N = 86) comprised of retirees moved to Jeju Island permanently and temporary. The data were collected through structured face-to-face interviews to increase response rates. The questions included general demographic characteristics, types of supports, perception of a sense of community, and general satisfaction.

The demographic characteristics included gender, education level, age, and monthly household income. The types of supports included economic, education, social and welfare supports and the participants were asked to identify their needs on those supports in categorical variables. The perception of a sense of community was asked in 5 point-Likert scales with 8 items. The general satisfaction living in

Jeju Island was also asked in a 5 point-Likert scale (1 very unsatisfied to 5 very satisfied).

61.6% of the participants were men and the majority of the participants (55.8%) were college graduates and aged between 56-60. For the majority of the participants (43%), current monthly household income was between 1,000,000 – 2,000,000 Korean won (\$2,000 – 3,000 in USD). SPSS Version 20 was used for descriptive statistics and t- tests.

### Results

Permanent movers' current monthly household income ( $p < 0.001$ ) and education ( $p < 0.05$ ) were significantly lower than temporary movers. On the other hand, there was no significant difference between permanent movers and temporary movers' perception on sense of community items. However, temporary movers' general satisfaction with living in Jeju Island was significantly higher than permanent movers to Jeju Island ( $p < 0.05$ ).

### Conclusions

Jeju Island is very unique. It is the well-known tourist community and has attracted many retirees because of its mild weather and natural amenities. Regarding that household income and education levels are lower among permanent movers, they are the ones who can benefit more from economic and social supports. The different needs between the permanent and temporary movers should be explored further.

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**Engage, educate, guide: Using practical experiential learning activities to  
improve student success**

Kristi Julian, East Tennessee State University

Demetriss Locke, Tallahassee Community College

The Federal Aviation Administration requires airports to have an emergency response plan that coordinates with local law enforcement, rescue and firefighting agencies. Airports must exercise this plan every three years in order to simulate the circumstances of a disaster to practice emergency response.

The U.S. Department of Education and various accrediting bodies are holding institutions of higher education accountable for retention and graduation rates. Faculty at these institutions must utilize innovative teaching methods to positively impact student success inside and outside of the classroom (Kuh, 2003).

One way to engage students inside and outside of the classroom is by having students participate in assigned co-curricular activities like the emergency response airport drill, which provides a crosswalk from theory to actual practice. This level of engagement allows for a critical thinking approach which may provide students with the tools necessary for increasing awareness of ADA, life safety and other factors involved in housing. It provides unique opportunities for making design decisions involving health safety and welfare during these times in which we must be prepared for any form of a Mass Casualty Incident (MCI), be it terrorism, bioterrorism or devastating natural disasters.

Freshman and sophomore level students enrolled in Nursing, Interior Design, and Cosmetology programs participated in a Mock Airport Disaster simulation during the spring. During the drill, makeup was applied so that students resembled an accident victim and they were given a card to wear that identified their injury. They were spread out in the grass around the accident area and told to act as if they were really hurt to allow the medical and rescue agencies to respond to the situation.

The research question asked: What is the frequency and percent of responses for all participants on how classroom engagement with other disciplines through a practical experiential activity, affects student success and retention of design concepts?

The survey was administered to students (N=108) who participated in the emergency response drill. The survey investigated their perceptions of studio attendance as it relates to student success and retention of concepts before and after the airport drill simulation. Findings revealed that most students (88%) were more eager to attend class when professors used field based experiences to connect design theory with practice. Assessment revealed students (92%) were able to connect flammability and life safety concepts more readily as a result of the simulation experience.

The experience at the Airport Mock Disaster drill served to fill several areas of classroom content in a simulated environment. Class content that applied to the airport simulation was teamwork by involving multiple disciplines. It emphasized community service by involving the students firsthand in the actual process with first responders. Space planning and programming knowledge was increased by interaction with the nursing students. Students were made aware of the importance of selection, storage, security and placement of hazardous building materials as well as their toxicity by actually observing the smoke density and its development during the exercise.

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## **Infant safe sleep environments:**

### **A comprehensive evaluation model for refining educational messaging**

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An increasingly urgent area of concern in healthy housing is that of a safe sleep environment for infants. Beyond the more traditional housing-associated considerations such as indoor air quality, the confluence of physical surroundings and caregiver behaviors influence the health—and survival—of a child's critical first year. Research and child death investigations conclusively show that the majority of deaths previously classified as SIDS are, in fact, sleep-related deaths, most of which occur in a child's own home. The good news is that these tragic deaths are preventable. In 2010, 141 Tennessee infants perished in unsafe sleep environments. The Tennessee Department of Health identified infant safe sleep as its most crucial child mortality issue, launching a statewide mass media campaign on infant safe sleep, directed at stemming the tide of these tragic deaths.

The University of Tennessee Extension, historically a partner in the state's child death review process, submitted a successful proposal to evaluate the safe sleep campaign. UT Extension's interest included measuring the effectiveness of mass media campaigns in accomplishing behavior change, involving Extension field faculty in a formal research-based evaluation process, and bridging research to education with easily measured impacts.

The applicable methodology for the evaluation project included written survey instruments, individuated for each of four targeted audiences; i.e., parents, grandparents, childcare providers, and healthcare professionals. Seventeen of Tennessee's 95 counties were strategically selected as survey sites, based upon their geographic location (representative of metropolitan, suburban, and rural populations) and their incidence of infant mortality.

The brief survey questionnaire examined respondents' 1) awareness of the campaign message; 2) comprehension of the campaign message; 3) motivation for behavior change; and 4) reaction to campaign messaging. Surveys were to be distributed based on the specific audience. Most parents were reached by placing surveys and a drop box into the offices of various healthcare providers, personal calls were made to physician offices for healthcare providers, grandparents and childcare providers were identified through Extension programs. The number of surveys desired was parents/800, grandparents/160, childcare providers/80, and healthcare providers/80. Surveys completed and used in the study were for parents  $n = 1249$ , grandparents  $n = 250$ , childcare providers  $n = 102$ , and healthcare providers  $n = 40$ .

The review of the literature suggested that cultural practices and attitudes towards some sleep environment components, such as co-sleeping, might prove conflictual. To better understand these issues, the evaluation project featured the convening of two focus groups with targeted audiences. Additional post-process interviews with participating Extension field educators provided further insights for subsequent educational efforts. Comprehensive quantitative and qualitative data analysis will be made available.

Preliminary findings indicate this infant safe sleep campaign was successful and effective with parents, grandparents, and professionals. For parents, the behavior changed the most was to remove fluffy bedding in cribs. Data also shows some parents still believe co-sleeping with infants is safe. Focusing on infant safe sleep within the parameters of not only maternal and child health, but as a *housing* concern, as well, should help ensure that this critical issue commands the efforts of yet another group of committed professionals. The elimination of infant sleep-related mortalities is achievable.

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## **Minimizing major barriers to homelessness**

Ardretta Jones, Rescue Mission

### Introduction

The MEMBERS program provides case management to assist homeless persons in Washington State to locate and maintain permanent housing. Homelessness, especially chronic homelessness, is a problem in Washington State as nearly as 10.45 percent of the homeless population is currently considered chronically homeless (National Alliance to End Homelessness, 2012). The purpose of this abstract is to introduce strategies to clearing criminal records, and help stabilize persons experiencing homelessness and chronic homelessness.

### The MEMBERS program: Meeting housing needs

The MEMBERS program meets the most basics of needs. Theoretically, MEMBERS is based on Maslow's Hierarchy of Needs; primarily focusing on 1) physiological, 2) safety needs, 3) love and belonging, with clients graduating after reaching 4) self-esteem stage, and are encouraged to meet stage 5) self-actualization upon six month follow-up (Maslow, 1970). The overall goal of the program is permanent housing placement within 30-days, minor barrier elimination within 90-days, and major barrier elimination within one year. The program takes between one and three years to reach completion. The MEMBERS program is an effective tool in helping homeless persons meet a basic need, that is, permanent housing.

### The Rescue Mission: Providing MEMBERS program resources

Washington State Senate House Bill 2163 called for an initiative to end homelessness ("Ending homelessness," 2011). The funding for the bill allows direct services for clients for housing, medical, legal consultation, utilities, education, and employment. In Tacoma, WA, the Rescue Mission, a non-profit that initially began as a Soup Kitchen 1912, is a provider of MEMBERS program resources.

Each year, the Rescue Mission is required to request funding through Pierce County Community

Connections via a written application and an oral presentation process. The Rescue Mission provides emergency service; shelter stays, food, showers, community mailbox, laundry, lockers, and was authorized to provide these services to homeless and transition populations. The Rescue Mission effectively provides case management to assist with locating and maintaining permanent housing. The Rescue Mission is unique in that it provides an umbrella of services, which are easily accessible for clients, such as drug and alcohol in-patient treatment, community service, continuing education, and volunteer opportunities; addressing many life domains from a holistic approach. At the end of the MEMBERS program, clients are given concrete evidence of their transition through a portfolio containing their criminal and credit reports, certificates, degrees, voters registration, Driver's License, and any other tangible benchmarks.

The Rescue Mission conducts state criminal background checks on clients prior to being housed; background checks are used as a tool for the client to screen for prospective landlords, and eventually they're used to clear the clients' record. Clients who participate in the Rescue Mission program are tracked through a Homeless Management Information System (Bowman System, 2010)

(Bowman, 2013); research prompted the creation of workshops clearing criminal records. Attorneys are brought in to offer workshops on sealing, and vacating state criminal records, while partnering with professional consultants to provide one on one, hands on guidance through the entire process. Clients are also referred to financial literacy classes, and given a copy of their Credit Reports and beacon scores. Clearing records strongly encourages law abiding behavior, since it provides one with the opportunity to restore their civil rights. The prospect of having a clean record is empowering. The intended purpose is to go from a homeless felon to being permanently housed, without a felony, able to access education and employment.

## Results

Since 2006, the program has housed over 500 individuals, families, singles, and unaccompanied households, and developed over 60 landlord contacts, while partnering with private, non-profits, and other public agencies, through community outreach. The information is reported to Pierce County, and is public knowledge available at <http://www.co.pierce.wa.us/Index.aspx?NID=97>.

## Future Directions

The MEMBERS approach could play an important role in stabilizing the needy population (permanent supportive housing and chronic homeless persons). Currently, the needy population accesses more than 50% of total number shelter days (National Coalition for the Homeless, 2010). Unlike other models, the MEMBERS approach is designed to meet the needs of many different populations, at comparable or lower costs per household, than others models currently used.

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## **Elements for improving regional housing affordability: With a focus on housing experts' opinions**

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### Background

The Tri-County Regional Planning Commission (TCRPC) for Greater Lansing's region of Clinton, Eaton, and Ingham Counties initiated the Mid-Michigan Program for Greater Sustainability (MMPGS). The US Department of Housing and Urban Development (HUD) awarded the program \$3 million over three years (2012-2015) for regional planning efforts integrating housing, land use, economic and workforce development, transportation, and infrastructure development in a comprehensive and inclusive manner (TCRPC, 2011).

MMPGS includes nine primary planning projects. As the second one, a Regional Affordable Housing Study is being conducted. This paper focuses on that two-year regional affordable housing study. The research goal is to provide information about the current regional housing situation and help TCRPC set practical and achievable goals to improve regional housing affordability.

The research activities include an analysis of 2000 and 2010 census data, interviews with 33 housing experts and 30 urban planners, reviews of land use and zoning regulations, and a public survey of approximately 600 residents. This paper concentrates on the housing experts' opinions about how to improve regional housing affordability. It will report their practical opinions about regional housing affordability and elements that need to be considered for improving housing affordability.

### Research Scope and Methods

First, major housing characteristics were analyzed on a basis of the 2000 and 2010 censuses and the 2010 American Community Survey 5-Year Estimates. Then housing experts were identified through recommendations of the Housing Task Force, which included planners, and key stakeholders of housing in the region. The subjects for the interviews were relators, developers, property managers, housing service coordinators, loan providers, architects, directors, or administrators of various shelters for minorities or low-income families. The major objective of these interviews was to obtain practical opinions

about regional housing affordability and elements that could improve it. A total of 47 housing experts were identified, and 33 finally participated in the interviews between December 2012 and March 2013.

### Major Findings and Suggestions

#### (1) General Housing Characteristics in the Tri-County Region

According to the 2010 American Community Survey (US Census Bureau, 2010), Michigan has approximately 4.5 million housing units. As of 2010, the Tri-County Region has 196,866 housing units comprising 4.4% of Michigan's total. Homeownership rates and median housing values differ among the three counties, with Ingham having the lowest. Demographic and socioeconomic characteristics are also different among three counties. Ingham has a more ethnically diverse population than Clinton or Eaton, where more than 90% of the population is Caucasian.

#### (2) Definition of *Affordable Housing*

According to HUD, the general definition of *affordability* is when a household spends no more than 30% of its annual income on housing. Housing costs are calculated from the sum of payments for mortgages, real estate taxes, various insurance, utilities, fuels, mobile home expenses, and condominium fees (HUD, 2013). All elements determining *housing affordability* were for housing itself, with no other parameter in defining it.

#### (3) Housing Experts' Opinions for Improving Regional-Housing Affordability

Housing experts familiar with HUD's definition of *housing affordability* strongly emphasized differences in regional characteristics, and proposed suggestions for improving regional housing affordability and redefining *affordability* of housing. First, they stressed the importance of transportation cost in determining housing affordability because this region has many suburban communities surrounding the major metropolitan area. In addition to the typical suggestion for improving housing affordability, which was "providing more financial sources or loan opportunities for renters and homeowners," the experts came up with new ideas as follows.

Regarding financial support, most suggested more subsidies in affordable housing for the elderly

and minorities and energy-efficient housing. Not surprisingly, many emphasized a number of affordable housing options, while also highlighting the need for additional rental units. They also proposed creating a housing authority for this region, adopting comprehensive regional housing plans that consider jobs and housing, reinforcing codes and regulations that could encourage mixed-use and higher-density development, and simplifying the process for low-income families to find permanent homes. As one of the most critical issues, they stressed having more transportation options in the region. They also highlighted walkability and bikability around the communities.

Due to the economic turndown, new housing developments have been slow in these areas. Several housing experts thus recommended implementing any types of incentives for affordable housing builders or developers. For the last component, they suggested providing education opportunities for tenants and low-income households about rental-housing affordability and maintaining good credits for future home purchasing.

These findings point to consideration of the above-mentioned elements when determining regional housing affordability, in addition to offering financial sources for mortgages, real estate taxes, various insurance, utilities, fuels, mobile home expenses, and condominium fees, which all together traditionally defined *affordability* of housing. In other words, regional housing affordability should be defined through embracing all these issues – existence of diverse transportation options, any regional housing authority, incentives for energy-efficient affordable housing construction, etc. Regional housing affordability should be understood holistically and multi-dimensionally, which must be more complicated than individual household's housing affordability. Therefore, our study suggests that policy makers and planners should review all these diverse aspects when determining their region's housing affordability.

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**Teaching non-major graduate students about housing:  
Environmental influences on the family**

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*Environmental Influences on the Family* is a five-week intensive distance summer course for non-housing majors in the Family Life and Youth Development (FYD) master's program. The FYD Program is a distance degree program offering a thesis and non-thesis option for master's students. An applied course of study, the program produces graduates that work directly in youth and family programs and include teachers, administrators, and family life coaches. As a distance program, FYD reaches traditional and non-traditional students, both in the university's home state and across the country. The FYD program is new, accepting its first graduate students in the fall of 2010. This program was the result of a merger of two other separate master's programs in Human Development and Family Studies (originally begun in 2006) and Youth Development and Leadership (originally begun in 2003). Students entering the FYD program come from a variety of academic backgrounds, including family life development, human development, counseling, and secondary education. Most FYD students have little to no academic experience in housing or housing related courses.

The FYD program offers six different areas of concentration: Family Life Coaching, Aging and Family Life, Family Life and Parent Education, Youth Development and Leadership, Administration and Leadership of Youth and Family Life Programs, and Volunteer Management and Administration. The core courses for all of the concentrations include theory and application of youth and family life programs, program development and evaluation, research methods, and statistics. Courses are taught both synchronously and asynchronously using Blackboard Collaborate and courses use Moodle as the course management system.

Not included in any of the core course content was information about the living environment. The living environment, including the home, neighborhood, and community, is an essential element in the social, psychological and physical well-being of youth and families, (Department of Health and Human



Services, 2009). *Environmental Influences on the Family* was created to address this critical gap in subject matter. This survey course uses the *Introduction to Housing* text to expose students to a wide variety of pertinent housing related content. Nine modules make up the course: Housing Choices, Family Well-Being, Housing Policy, Neighborhood Development, Obesity, Homelessness, Affordability and Poverty, Sustainable Housing, and Disaster Resiliency. Using journals, discussion forums, and reflection activities, students explore housing and its influence on families; examining its relationship to their own individual development as well as applying what they learn to their current or future clientele. Embedded in the assignments and activities is the theme that environments matter and can obstruct or facilitate positive growth and development. The course culminates with a project in which students apply concepts they have learned about housing, neighborhoods and communities by assessing a specific neighborhood community.

Youth and family professionals are missing an important component of family life if they have no comprehension of the influences of the living environment on their client populations. The *Environmental Influences on the Family* course provides this critical content and provides a relevant context from which to apply family theories and practices to address client needs.

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## **A demographic profile of older adults' disabilities and housing accessibilities:**

### **The 2011 American Housing Survey**

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#### Introduction

Older adults are likely to experience declines in their health status that results in more of them being classified as disabled than people in other age groups (Brault, 2012). Their disabilities can cause stress when their home environment is not accessible or useable. The Environmental Press Model has guided the development of a continuum of housing options that offer support to older adults seeking housing that meets their needs (Lawton, 1980). However, aging in place in current housing continues to be the preferred choice for a majority of older adults. But because of the accessibility of their current housing, it is not clear how feasible this option is.

#### Purpose and Rationale

This paper examines associations between demographic characteristics of households age 55 and over, and their disabling and housing conditions (i.e., disabilities, mobility devices, home accessibility problems, accessibility features in home, and wheelchair accessible features). The study uses a nationwide data set to explore relationships that can help explain which older adults are most at risk of not being able to remain in their current housing because of a lack of accessible and supportive features.

#### Methodology

This study analyzed the 2011 American Housing Survey (AHS) data, the biennial survey by the U.S. Department of Housing and Urban Development (HUD) and the U.S. Census Bureau. 2011 is the first year that the survey included households' disabilities and accessibility feature present. Demographic characteristics include age, gender, education level, marital status, family income, number of household

members, geographical location, tenure type, and structure type. Disabilities (6 items), mobility devices (6 items), home accessibility problems (9 items), home accessibility features (14 items), and wheelchair accessibility features (7 items) were dichotomous variables (yes=1 or no=0). Mean value of each variable was averaged for further analyses (range from 0 to 1). The useable sample was 30,748 household heads, age 55 years and over. SPSS was used for descriptive statistics, t- test, ANOVA, and regression analysis.

### Findings

Adults who were older, female, renters, had lower education, less income, smaller households, were not married, and lived in multifamily housing in urban areas were more likely to have disabilities, use mobility devices, and report accessibility problems. People who were older, female, had higher education, more income, smaller households, and lived rural areas were more likely to have accessibility features in their home. Older adults who were older, married, owners, had more income, and lived in single-family housing in rural areas were more likely to have wheelchair accessibility features in their home.

### Conclusions & Implications

Low-income, older, single, female, renters living in multifamily housing located in urban areas are most in need of housing improvements that would reduce their accessibility problems. However, multifamily rental housing is the housing type least suitable to home modifications. Much of this housing stock was built before Fair Housing Accessibility Guidelines were implemented and few individuals want to modify housing that belongs to others. Cost effective modifications and accessible solutions need to be developed and promoted to older adults living in apartments.

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## Young professionals' housing cost burden and financial dependence on parents to afford housing costs in Korea

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### Research Purpose

As a part of research study series to explore housing and housing cost burden problems of young professionals in Korea and the United States, this study was aimed to investigate housing cost burden and financial dependence on parents among young professionals working in architecture and interior design fields in Korea.

### Methodology

Between March 14, 2013, and April 10, 2013, a questionnaire survey was administered to professionals working in architecture and interior design related companies in Seoul Metropolitan Area.

The subjects were limited to persons who:

- Were within three years from his/her first employment after college graduation;
- Were with bachelor's degree or higher educational attainments;
- Were never married; and
- Lived apart from their parents and other relatives at the time of the survey.

A total of 55 useable responses were collected from 10 companies that were selected using a snowball sampling technique.

### Findings

Most frequent tenure type was monthly rent (42 respondents, 76.3%), followed by *Jeon-se* rent (13 respondents, 23.6%). *Jeon-se* is a unique rental system in Korea. The owner of the housing unit receives lump sum money as *Jeon-se* deposit from the renter and takes benefit of bank interest of the lump sum money instead of collecting monthly rent from the renters. When the lease is terminated, the owner returns the original money back to the renter. To examine the housing cost burden of the

respondents, *Jeon-se* deposit to income ratio (JIR) was calculated for each of the *Jeon-se* renters; and security deposit to income ratio (DIR) and monthly rent to income ratio (RIR) were calculated for the monthly renters. Income used for the calculations was monthly income. Average JIR was 44.2 ranging from 24.9 to 86.3. Among 42 monthly renters, only 35 paid security deposits and average DIR of the 35 monthly renters who paid security deposits was 9.1 (2.5 ~ 36.0). Average RIR of total 42 monthly renters was .25 (.03 ~ .72).

To afford housing costs, 66.7% of the monthly renters (28 respondents) and 76.9% of the *Jeon-se* renters (10 respondents) had already received or were currently receiving financial supports from their parents. More than 54% of the total respondents perceived it reasonable to receive parental supports even after their college graduation. Furthermore, 23.6% of the total respondents thought it was reasonable to receive parental supports even after employment. The perception of parental supports was found not significantly influenced by whether or not currently receiving supports or by rental types using chi-square tests of independence.

### Conclusions

The study findings indicate young professionals in architecture and interior design related fields in Korea were paying a great portion of their income on housing rent or the deposits were extremely expensive compared to their income. For the reason, it seems very difficult for the young professionals to afford their housing costs without any parental supports. To reflect the reality, many of the young professionals perceived it was reasonable to receive parental supports even after college graduation or employment. Thus, it will be necessary to develop rental housing with a lower rent and/or deposit in order to reduce housing cost burden of the young professionals and also financial burden of their parents.

In the presentation, more details of the study findings including the sampling process, income, housing costs, and comparisons of current housing cost burdens with cost burdens in housing when first employed after college graduation as well as further study plan will be introduced.

## **Resources and constraints for U.S. baby boomers' housing affordability:**

### **Application of the housing adjustment theory**

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#### Introduction

The generation of Baby Boomers includes those born between 1946 and 1964, and totals 78 million, 26% of the total U.S. population (cited in Hellmich, 2010). The recession of the late 2000s negatively influenced Baby Boomers. A decrease in both housing values and retirement funds led them to experience an increased housing cost burden. The question of housing affordability is more likely to affect older adults because they may not have enough time left to redirect their long-term financial plans to produce sufficient income to recover from the impact of the recession (Butrica, Johnson, & Smith, 2011). From this perspective, housing professionals should explore this cohort's housing affordability issues. Applying the *Housing Adjustment Theory* (Morris & Winter, 1975, 1978), this abstract discusses constraints and resources which U.S. Baby Boomers currently have in the context of housing affordability.

#### Housing Adjustment Theory

The *Housing Adjustment Theory* is employed mostly in housing research investigating housing satisfaction, housing preferences, and housing decisions (Steggell, Binder, Davidson, Vega, Hutton, & Rodecap, 2003). The theory deals with the complex process by which families make housing decisions and reveals the relationships among individual, housing, and neighborhood characteristics within a social context (Morris & Winter, 1978). Housing norms and constraints or resources are important influential forces when members of a household need to make decisions about changing their housing conditions. U.S. Baby Boomers may reveal unique demographic and housing characteristics, which can be considered as resources or constraints when exploring their housing conditions.

## Constraints and Resources of Baby Boomers

Constraints and resources in this abstract were drawn from Lee and Ahn's (2013) study investigating the housing affordability for U.S. Baby Boomers. In this study, the secondary data set, 2009 American Housing Survey and binary logistic regression were employed. Lee and Ahn found statistically significant demographic and housing variables related to housing affordability for baby boomers, which can be considered as constraints or resources.

Being a female or a minority, having less education, living in urban areas, having a relatively larger structure size, or being a renter can be considered as constraints which lead to less affordable housing. However, living in the Midwestern or Southern U.S. can be considered as a resource for increasing housing affordability levels, compared to more expensive living expenditures in the Western or Northeastern areas. Other resources could be having full amenities (requiring less expenditure for home modifications or repairs), or living in a manufactured home with less expensive housing costs. Living in houses built between 2000 and 2009 could be considered as a constraint because of the relatively larger amount of mortgage payments.

## Conclusions and Implications

Many Baby Boomers, as a result of the recent recession, face the future with significant depreciation in the value of their homes and their anticipated retirement incomes. The authors identified Baby Boomers' constraints and resources regarding housing affordability, which can be used as timely programming information for housing and consumer educators and students. Also, this study can provide policymakers and practitioners with needed understanding on housing affordability issues of U.S. Baby Boomer households.

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## **Describing culturally competent housing services**

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The purpose of this pilot project was to examine how families in supportive housing describe their needs, define cultural competency, and the influence of services on their ability to maintain housing. The research study extended the work of a case study of a non-profit's attempt to implement and evaluate cultural competent practices.

In the United States, homeless families with young children are increasing prevalent. In 2009, African Americans represented over half (50%) of the homeless population. Increasingly African Americans, especially single mothers, are more likely to be homeless and poorer when compared to other racial groups among homeless families. Despite this growth in the African American community there have been few studies designed to understand this phenomenon and address African American's unique housing needs (Hershberger, 2001; Rog & Buckner, 2007; U.S. Department of Housing and Urban Development, 2009).

Cultural competency has been defined as a set of behaviors, customs, beliefs, and attitudes that provides effective and culturally appropriate services based on participants' race, ethnicity, religious and/or social groups (Cross, 1988; Gallegos, Tindall, & Gallegos, 2008; Gillum, 2009; Shiu-Thorton, 2003). Culturally competent research is concentrated in physical health, mental health, and education. By 2035, minorities will represent 40% of the U.S. population and by 2050, 47%. However, little research focuses on the relationships between African American culture and housing services. Furthermore, there is minimal evidence that services in supportive housing help families stabilize and achieve self-sufficiency (Brach & Fraserirector, 2000; Rog & Buckner, 2007).

The research was qualitative in nature to understand service delivery in supportive housing from the viewpoint of African American families. Researchers acknowledged their values and cultural knowledge about the community and housing (Milner, 2007). The researcher's goal was to hear the voice of participants and give homage to those voices (Creswell, 2012). Through semi-structured interview questions participants, two African American parents residing in supportive housing, described their needs, shared experiences in receiving

supportive services, and recounted interactions with program staff. The data included written descriptions of the surroundings and reflections by the researcher. Analysis consisted of reading transcripts multiple times, organizing data into tables, rigorously coding and categorizing themes.

The findings indicate that both housing and services are crucial factors in stabilizing African American families in supportive housing. Participants' describe a variety of treatments, comments, and attitudes in interactions with program staff. They perceive that the character of interactions influences the outcomes of the services. Race emerged as a critical theme in determining how participants felt they were treated. Although this study has a very small sample, it provides the housing community with a glance into the needs of African American families in supportive housing. Participants in supportive housing expressed the need for increased food assistance and workforce preparation to achieve their individual goals. The findings underscore the need to continue examining culturally competent services and African American families' ability to sustain housing. The pilot suggests the need for more, larger, replicable studies of cultural issues in supportive housing and helps researchers revise interview questions for a larger study.

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## **Focus on sustainability issues in the education of kitchen and bath design professionals**

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In North American homes, kitchens and bathrooms are complex, expensive, and technically detailed areas to design and construct. These spaces are the most frequently renovated, and are energy and environmentally intensive. Two new comprehensive books, *Kitchen Planning: Guidelines, Codes, Standards* and *Bath Planning: Guidelines, Codes, Standards*, targeted to university students, as well as kitchen and bath designers, interior designers, and architects seeking professional advancement and/or certification, were developed with a particular goal of incorporating sustainability concepts into kitchen and bath design.

This abstract highlights key sustainability content from the books that will be in the conference presentation. This content may be new to attendees, and can provide ideas for incorporating these sustainability concepts into their professional activities. The presenters will outline the challenges of incorporating “green” or sustainable techniques, materials, and equipment into the design, construction, and client usage of kitchens, bathrooms, and other functional spaces in the context of the education and professional development of housing designers.

The books' focus on sustainability issues integrates “green” building concepts, from preliminary space design through construction to the needs of the end user. Developed for use in both the United States and Canada, the books were extensively reviewed by practicing professional designers and educators in both countries. Content is research-based and written with reference to the model 2012 International Residential Code. Technical details are drawn from organizations such as the United States Environmental Protection Agency, United States Department of Energy, Health Canada, and Natural Resources Canada. Metric and Imperial measurements are integrated throughout the text and illustrations.

Various building standards, such as the ICC 700 National Green Building Standards™, LEED for Homes, and R-2000, are evaluated; certification programs such as Energy Star®, Cradle to Cradle<sup>CM</sup>, Ecolabel,

and Forest Stewardship Council are discussed. Mechanical issues such as effective and efficient ventilation, including whole-house ventilation, reference the 2012 International Energy Conservation Code, and the discussion of indoor air quality emphasizes moisture control and renovation hazards. The text also covers structural issues such as the importance of the thermal envelope and an effective air barrier.

Since bathrooms are areas of high water use, water quality, gray water, water recycling, and water conservation, including information on WaterSense®, are detailed in that volume. In the kitchen book, information on Primary and Secondary Drinking Water Standards, as well as planning for waste management and recycling, are a focus. With many consumers wanting to recycle and compost, new kitchen design strategies are suggested. Lighting, including the new energy standards and changes in the types of light sources allowed on the market, is examined in both books for sustainable performance as well as the influence on design and client satisfaction.

A detailed *Instructor's Manual* was written for each book and is available through the publisher's web site. Learning objectives, key terms, review questions, topics for instructor-led discussion, application activities, and online activities are provided for each chapter.

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## **Sleep tight: Bed bugs Extension education in a rural state**

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This abstract focuses on the delivery of bed bugs Extension education. Extension is uniquely positioned to provide education on risk management associated with bed bugs topic due to its collaborative, cross-discipline structure. Both Agriculture and Family and Consumer Sciences (FCS) are important to bed bugs risk management. Family and Consumer Sciences is able to frame education within the US Department of Housing and Urban Development (HUD) seven principles of healthy housing (keep it dry, clean, pest-free, safe, contaminant free, ventilated, and maintained). Of these, Extension bed bugs education encompasses keep it clean, pest-free, and containment free.

Bed bugs education and risk reduction are emerging issues. Fortunately, in Oklahoma, grassroots efforts have established a framework for Extension to guide education. Grass roots efforts established this framework. Data were collected from youth and adults and categorized by theme into nine unique Issue Teams. One team, the Safety Issue Team, established a series of short, medium, and long term measurable outcomes that can be applied to healthy homes education, and subsequently bed bugs education. The topics are an appropriate fit for the Safety Issue team, given the long-term goal of reducing risk that may harm consumers. The following is an example of this framework in use.

Extension bed bugs education delivery: An urban housing authority in a rural state is overwhelmed by bed bugs. Housing authority staff contacts the Extension Service for educational assistance. State Extension specialists and local county educators work with the housing authority to identify risk reduction strategies. It is determined that bed bugs risk reduction is most effective with cross discipline, collaborate effort.

Short term change: Extension education is conducted with the following objectives: Participants will understand connections between pest management, their living environment, housing, health, and well-being.

One module has been developed. Extension FCS and Ag educators have presented eight (8) lessons from the developed education module, reaching at least 185 residents with some bed bugs education. Evaluation information is collected from attendees at every session to ensure the presentations are giving residents the information they need and want. Five (5) additional bed bugs modules are planned for development.

Medium term change: Increase number of Oklahomans practicing safety and injury prevention. The goal is to significantly reduce Housing Authority bed bugs expenditures. We are in the process of working towards reducing costs associated with bed bugs infestation and housing authorities' expenditures. During the short term, we have identified some weaknesses in current housing authority efforts. Efforts may be improved to strengthen long-term outcomes.

Long term change: Residents will reduce risks that could affect their health, well-being, and safety in their homes and communities. Bed bugs risk reduction is part of a strategy for successful, long-term change.

Visioning Success: Bed bugs elimination has proven to be very difficult. Delivering bed bugs Extension education in the Safety Issue Team framework is leading to initial, measurable success.

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## Financial satisfaction and home ownership status

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Significant attention has been given to the concept of financial satisfaction, as evidence suggests that financial satisfaction is an important aspect of overall well-being (Campbell, 1981; Easterlin, 2006). A number of studies have examined the potential relationship between home ownership and subjective well-being (Diaz-Serrano, 2008; Elsinga & Hoekstra, 2005), with the general conclusion that home ownership may be associated with greater financial satisfaction. Using data from the 2009 FINRA Financial Capability Study (n = 24,215), the present analysis explores the relationship between financial satisfaction and home ownership status in the context of individual financial knowledge, the recent economic crises, and other financial factors. Commissioned by the Financial Industry Regulatory Authority (FINRA), the Financial Capability Study investigated the financial capability of U.S. adults through a series of three separate surveys. The state-by-state survey, which is utilized in the present analysis, was collected online over five-month period between June and October, 2009. The survey questionnaire consists of 9 distinct sections: demographic characteristics, current financial condition, use of financial professionals, use of bank accounts, retirement accounts, home ownership, credit cards, consumer loans, and insurance.

Several aspects of home ownership status were investigated including mortgage loan type, whether an individual shopped for their mortgage, whether they have been late on their mortgage payments, whether they have experienced a foreclosure, and timing of the home purchase related to the housing crisis. Additional variables of interest include objective and subjective financial knowledge, risk tolerance, and the presence of financial shock in the household. Ordinary least squares regression is used to predict financial satisfaction (measured on a Likert-type scale ranging from 1-10, where 10 is extremely satisfied with one's present condition and 1 is not at all satisfied). After controlling for various socioeconomic characteristics, the results highlight the relative importance of housing factors to overall financial satisfaction, and ultimately household well-being. Overall, the model is quite robust, and predicts roughly 47% of the variability in personal financial satisfaction. Relevant predictor variables include home ownership, having been late more than once on mortgage payments,



objective and subjective financial knowledge, having difficulty making ends meet on a monthly basis, age, education, marital status, employment, retirement status, income, whether an income shock was experienced in the past twelve months, risk attitude, investment asset ownership, emergency savings, insurance, and the use of risky loans.

On the whole, evidence is generated that aspects of home ownership are significantly related to financial satisfaction. However, parameter effects are much more pronounced for variables related to financial security, such as the income shock measure or whether or not individuals hold an emergency savings account. It is worth noting that the positive effects of home ownership are virtually negated in cases where households report making late payments more than once. Interestingly, those who experienced foreclosure within two years of the survey period are not significantly different from those who had not experienced a foreclosure in terms of financial satisfaction. Timing of housing purchase is also not a significant factor in the present analysis, as those who purchased a home within the last five years were compared to those with longer periods of home ownership. In contrast with some previous research, satisfaction does not necessarily increase with age. Interestingly, objective financial knowledge has a negative association with satisfaction, whereas subjective financial knowledge (what people think they know) is positively associated with financial satisfaction.

In general, the present study suggests that promotion of home ownership as a means of improving general well-being may not be an entirely effective strategy if other financial factors are not taken into account. While homeownership is significantly related to financial satisfaction, financial troubles associated with its ownership and operation appear to wipe out these effects. This suggests that care should be taken to ensure financial stability in a household before moving them towards homeownership.

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## Seeing community housing needs through service learning

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The proposed presentation will discuss the process and lessons learned from an undergraduate service learning project in a course taught jointly by the co-authors. Service learning is a form of pedagogy that links a course-based educational experience with organized, meaningful service activities designed to address an identified community need (Ash & Clayton, 2009; Bringle & Hatcher, 1995). When highly integrated into course material, students involved in service learning demonstrate greater openness to new perspectives, a deeper understanding of complex social problems and improved ability to apply class material when compared to students not involved in service learning (Fitch, Steinke & Hudson, 2013; Eyer & Giles, 1999). Service learning holds great potential for faculty and students who study housing issues and the communities in which we study. According to the Campus Compact 2012 Annual Member Survey, over 44 percent of students participated in some form of community engagement taking part in the study. The survey, which included responses from 557 out of 1120 member institutions across the U.S., identified issues of housing, homelessness and poverty among the most prevalent areas of focus (Campus Compact, 2012).

The service learning project, which included a neighborhood housing needs assessment, was an integral part of an undergraduate housing and community development course taught by the authors. The project was designed to help students gain an understanding of local neighborhood housing conditions while meeting the goals and needs of a non-profit community partner. Students took part in classroom training to learn windshield survey techniques, which they then applied through field work in the designated neighborhood. Students created a database and analyzed primary data from the windshield survey and secondary data from the tax assessor and U.S. Census.

The study neighborhood, which was located a few blocks from campus, is markedly different socioeconomically than the surrounding area. The Census tract in which the neighborhood is located has a median household income of \$15,536, half that of the county and poverty rate of 58%, over twice the poverty rate for the county. The neighborhood was predominantly African-American (76.9%) compared to 25.6% for the

county. Nearly two-thirds of the residents were renters. The majority of homes in the study area were single family homes or duplexes.

While the implementation of the service learning project occurred as planned, there were challenges. Timing of course content with different phases of project was difficult to coordinate at times. The authors found training to be one of the most important aspects of the course as it resulted in more accurate and consistent observations of housing conditions. While student absenteeism was a minor problem, it appeared to result in a lack of preparation, use of safety precautions and inadequate skills among a few students when conducting the windshield survey. Recommendations for future courses include adding training as a requirement for participation in the windshield survey as well as the identification of assessment strategies for different dimensions of student learning. While this course was designed for undergraduates, the methods used are applicable when working with volunteers in windshield survey projects. Reflections and course feedback from students will be discussed.

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## Healthy homes:

### **in-home environmental asthma interventions In a diverse low-income urban community**

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Asthma has many known indoor environmental triggers including dust, pests, smoke and pets and is the most common chronic childhood disease. Children are particularly vulnerable to home hazards and may develop lifelong health problems as a result of their home environment. The purpose of the research was to demonstrate how to reduce asthma burden and improve health outcomes for asthmatic children and their families within diverse, low-income urban communities. The main objectives of this study were to conduct home environmental assessments and individualized interventions focused on reducing indoor allergen levels and asthma triggers and to evaluate health outcomes associated with these in-home interventions.

#### Methodology and Procedures

A comprehensive health and environmental assessment and subsequent intervention were completed in 116 households with 170 enrolled children with doctor diagnosed asthma. The two largest populations included Hispanics (53%) and Asians (15%). Health and environmental assessments included survey questionnaires incorporating the American Academy of Pediatrics Children's Health Survey for Asthma (CHSA), visual observations, and dust sampling at baseline and at follow-up 11-12 months later to evaluate impact of the intervention on the health of the child/family. Home health workers provided household safety, asthma prevention education, and targeted environmental intervention to decrease asthma triggers and improve household safety, such as green cleaning alternatives, HEPA vacuums, mattress and pillow covers, commercial cleaning of homes, and integrated pest management (IPM). Major analysis included health effects on wheeze,

asthma attacks, doctor and ER visits and hospitalizations, as well as asthma scale assessment on physical health, physical activity child, physical activity family, emotional health child, emotional health family. Two sample and paired methods were used to calculate change in these measures from pre-intervention to post-intervention.

## Results

The study population of diverse, low-income children showed a statistically significant health improvement from baseline to follow-up. ER visits decreased by 81%; asthma attacks decreased by 76%; episodes of wheezing decreased by 66%; doctor's office visits decreased by 65%. Asthma scales scores increased: 35% (Physical Health Child); 30% (Emotional Health Child); 14% (Emotional Health Family). Both parametric and nonparametric methods found significant improvements in the pre to post intervention measures of these health and asthma indicators. The cost of the interventions (not including personnel) was \$45,243, while the estimated medical savings over a 4 week assessment period was \$72,164, resulting in an estimated annual savings of approximately \$854,000.

## Conclusions

Findings suggest that culturally and linguistically appropriate low cost, multi-component interventions decrease all measures of asthma severity and healthcare utilization in this low-income population of urban children.

## Implications

This study demonstrates that a relatively low cost comprehensive home environmental intervention can significantly improve the health and emotional well-being of diverse, urban, low-income asthmatic children and their caregivers. The potential for healthcare savings in decreased medication use and healthcare utilization is significant. Medical providers and insurers, as well as policy-makers need to consider the utilization of such interventions.

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## **Ethics: A roundtable discussion**

Ann Ziebarth, University of Minnesota

This roundtable will provide the opportunity for “active learning” focusing on a discussion of ethical issues in housing research and practice. Discussion topics will include concerns about “human subjects” as research participants or program clients, fiscal responsibilities, research and project data management, mentor/trainee relationships, and ethical conduct in collaborative projects. The roundtable has two goals. First, to provide an opportunity for housing researchers and practitioners to explore and discuss ethical challenges of their work. Many of the ethical questions arise in the process of doing research and many experienced researchers face ethical dilemmas never raised during their graduate education and training. Some of us are discovering new challenges as technology advances, the research questions we are considering have political ramifications, or the programming we are doing has social implications. For others, new sources of funding have resulted in unanticipated pressures with ethical implications. Housing practitioners face unique ethical issues. Extension Educators, for example, may be pressured to avoid topics that are unpopular, such as homelessness or housing discrimination, yet informed citizen participation may be strengthened by better information regarding changing demographics for community development planning processes.

The second goal of the roundtable is to provide an opportunity for researchers who are required by their institution to participate in continuing professional development to obtain this certification. The roundtable will be based on certification criteria for professional development required by the University of Minnesota for active researchers. The University requirement includes certification of a professional development ethics awareness/discussion activity every three years. This session may meet similar Responsible Conduct of Research requirements for those HERA members employed in Land Grant Universities or seeking external funding.

To facilitate the discussion, case studies that identify common concerns drawn from real world examples will be used initially. However, it is anticipated that participants will bring their own examples and raise problems that have occurred during their ongoing work. Both qualitative and quantitative research methodology will be addressed. All participants will receive a certificate of completion.



Two examples of the discussion cases follow:

#### Case Study #1 Recruiting Focus Group Participants

Bill is interested in the impact of mortgage foreclosures on youth. He thinks that young people should have a greater voice in housing research and wants to bring together three groups of teenagers to discuss the effect that a notification of mortgage foreclosure had on their lives.

- What specific ethical issues might be involved in doing this kind of research?

#### Case Study #2 Fiscal Management

Mary received a grant to conduct one-on-one interviews as part of her research project. Her budget included \$25.00 gift cards as thank you gifts for participants. Prior to conducting interviews she purchased 100 gift cards spending \$2,500.00 of grant funds as specified in her approved budget. Mary was able to interview 85 people during the timeframe of her project grant. She has 15 gift cards worth \$375.00 remaining.

- What should Mary do with the remaining card?