

# Environment and Behavior

<http://eab.sagepub.com>

---

## **New Housing as Neighborhood Revitalization: Place Attachment and Confidence Among Residents**

Graham Brown, Barbara B. Brown and Douglas D. Perkins

*Environment and Behavior* 2004; 36; 749

DOI: 10.1177/0013916503254823

The online version of this article can be found at:  
<http://eab.sagepub.com/cgi/content/abstract/36/6/749>

---

Published by:

 SAGE Publications

<http://www.sagepublications.com>

On behalf of:

Environmental Design Research Association

**Additional services and information for *Environment and Behavior* can be found at:**

**Email Alerts:** <http://eab.sagepub.com/cgi/alerts>

**Subscriptions:** <http://eab.sagepub.com/subscriptions>

**Reprints:** <http://www.sagepub.com/journalsReprints.nav>

**Permissions:** <http://www.sagepub.com/journalsPermissions.nav>

**Citations** (this article cites 25 articles hosted on the  
SAGE Journals Online and HighWire Press platforms):  
<http://eab.sagepub.com/cgi/content/refs/36/6/749>

# NEW HOUSING AS NEIGHBORHOOD REVITALIZATION

## Place Attachment and Confidence Among Residents

---

**GRAHAM BROWN** completed this work for his master's thesis at the University of Utah and is now a Ph.D. student in organizational behavior at the University of British Columbia. He examines cross-disciplinary approaches to territorial infringements in workplaces and neighborhoods.

**BARBARA B. BROWN** is an environmental psychologist at the University of Utah whose work examines territoriality, place attachment, and neighborhood design and functioning.

**DOUGLAS D. PERKINS** is director of the Ph.D. program in Community Research and Action, Peabody College, Vanderbilt University. He is a community psychologist who studies citizen participation, empowerment, and urban social and environmental change through grassroots community organizing and development, environmental assessment and criminology, and the use of social research in public policy making.

---

**ABSTRACT:** Neighborhood revitalization efforts include building new subdivisions in declining neighborhoods, but few studies have asked the incoming residents about the success of such new housing efforts. We examined neighborhood confidence and place attachment among residents of such a new housing subdivision ( $n = 56$ ) and compared them to newcomers ( $n = 99$ ) and old-timers ( $n = 271$ ) in the surrounding neighborhood. The new subdivision attracted comparatively wealthy, married, home-owning residents. Compared with residents in the surrounding neighborhood, new subdivision residents had more neighborhood confidence, especially those who perceived few incivilities and satisfactory neighborhood services. Subdivision newcomers had higher place attachments than newcomers to the surrounding neighborhood and as high attachments as old-timers in the surrounding neighborhood. Although largely attracted by affordable housing, new subdivision residents may become

ENVIRONMENT AND BEHAVIOR, Vol. 36 No. 6, November 2004 749-775  
DOI: DOI = 10.1177/0013916503254823  
© 2004 Sage Publications

important neighborhood contributors, given their levels of place attachment and confidence.

**Keywords:** *revitalization; neighborhood; crime; new housing; place attachment*

**The neighborhood revitalization literature** is replete with examples of projects and strategies that have failed to reverse neighborhood decline (Schorr, 1997). We argue that two major failings of these past attempts are that interventions are too unfocused and diffuse to be noticeable and that the psychosocial aspects of the revitalization process have been ignored. This study capitalizes on the opportunity to interview residents of a new revitalization effort that is focused and noticeable—an 84-unit, single-family-home subdivision. We examine whether the subdivision has achieved psychosocial success by creating the physical and social features needed to instill confidence in the residential block and a sense of place attachment among new residents. Although some believe the mere provision of new housing achieves revitalization, in keeping with our focus on psychosocial aspects of revitalization, this study investigates whether new residents report high levels of confidence and place attachment to the neighborhood.

#### REVITALIZATION STRATEGIES, FAILURES, AND EVALUATIONS

Past revitalization policies often focus on supporting individual rehabilitation efforts within a neighborhood. As an example, the Urban Homesteading Demonstration (UHD) Program sold dilapidated houses in declining neighborhoods for a nominal fee with the stipulation that residents agree to bring the house up to code and live there for a minimum of 3 years (U.S. Department of Housing and Urban Development, 1978). The goal of this program was not only to upgrade dilapidated houses but also to stabilize declining neighborhoods by attracting home owners (Varady, 1986). The influx of residents committed to improving at least part of the neighborhood was intended to provide the area with valued human resources, people who may commit to improving the neighborhood beyond their own house. Policy makers hoped that residents surrounding the homesteading properties would

---

*AUTHORS' NOTE: This research was supported by grant number 98-IJ-CX-0022 from the National Institute of Justice awarded to the second author and a University of Utah University Research Committee grant awarded to the first author. Points of view are those of the authors and do not necessarily represent the position of the U.S. Department of Justice. Portions of this article are based on the first author's master's thesis, completed at the University of Utah. We thank Lani Fisher and Will Wright for assistance in data collection.*

see the homesteading efforts, gain confidence in the neighborhood, and begin their own housing improvements, thus becoming “incumbent upgraders” (Clay, 1979, 1983). Unfortunately, urban homesteading was not accompanied by surrounding incumbent upgrading (Varady, 1986). Varady (1986) speculated that the homesteading properties were spread too thinly across the neighborhood to achieve sufficient improvements to reassure surrounding residents. In fact, only about 1% of the houses in the evaluated neighborhoods were UHD homes. Homesteading-type interventions that are this diffuse may fail to create spillover benefits in the surrounding neighborhood because the surrounding residents may not even be aware of the neighborhood improvements.

A second approach to revitalization is to build new subdivisions, which bring home owners and more spatially concentrated and noticeable physical improvements to the neighborhood. New subdivisions may be effective revitalization tools because they attract new home owners to neighborhoods suffering the social and economic decline associated with the loss of homeowners. In fact, neighborhood decline, the opposite of neighborhood revitalization, is defined as a decrease of desirability of an area and a turnover from home owners to renters (Goetze, 1979). A concentration of renters may be problematic for a neighborhood because renters tend to have lower financial resources and may be less committed to an area (Fainstein & Hirst, 1996). Moreover, home owners, compared to renters, know more neighbors (Fischer, 1982), live in a place longer (Rohe & Stewart, 1996), participate more often in community groups (Rossi & Weber, 1996), experience greater life satisfaction (Rohe & Stegman, 1994), and are less likely to leave poor neighborhoods (South & Crowder, 1997). Consequently, home ownership is perceived as a positive and important goal toward stabilizing neighborhoods and reversing neighborhood decline (Hollister, Auger, Walter, & Pattison, 1978; Orlebeke, 1997).

Evidence from a few case studies supports the use of new subdivisions as a revitalization strategy. For example, in Israel new housing projects were found to be crucial to improving the status of a neighborhood, whereas scattered site housing rehabilitation was insufficient to do so (Carmon & Baron, 1993). Similarly, new subdivisions constructed or rehabilitated by not-for-profit community development corporations (CDCs) helped revitalize places like the Bronx and the Sandtown-Winchester neighborhood of Baltimore (Schorr, 1997). Other cities also advocate new housing subdivisions as essential parts of a total housing policy (Kromer, 2000). These successful revitalization efforts may have served as unmistakable and impressive changes to the neighborhood. However, the most famous case study successes in the United States received massive social programs and aid. For

example, the Baltimore improvements were supported by more than \$60 million in public, private, and governmental monies during the first 7 months. Coordinated community-building efforts provided social services, education, job training, and neighborhood cleanup (Goetz, 1997). Both the amount of funding and the comprehensiveness of the intervention efforts in these projects make comparisons with regular "housing only" revitalization efforts difficult. This study involves a more modest effort, more typical of many financially strapped cities, where money was provided for new housing infrastructure development and some surrounding rehabilitation funding but no supportive social services.

The need to evaluate the strategy of building new subdivisions as neighborhood revitalization interventions has taken on added urgency in light of recent U.S. government policy initiatives that encourage new subdivisions. Perhaps in recognition of the limitations and diffusion of past revitalization efforts, in 1996 the Clinton administration launched Homeownership Zones, designed to have stronger impacts (U.S. Department of Housing and Urban Development, 1996). For example, three home ownership projects in Cleveland, ranging from 81 to 218 units, are touted as creating opportunities to transform unattractive areas to safe and attractive areas while providing an array of benefits. Benefits include local employment during construction, property tax generation, and the creation of a population base that can provide greater demand for local economic products and services. However, these benefits focus exclusively on economic consequences; comprehensive neighborhood revitalization requires committed and confident residents as well.

#### NEW RESIDENTS AS REVITALIZATION PARTNERS

One goal of this study is to assess residents' feelings and beliefs that are crucial to healthy neighborhoods (DeGiovanni, 1984; Unger & Wandersman, 1982). Generally, revitalization evaluations focus on what was built or on subsequent mobility rates and property tax assessments in the target areas (Galster & Hesser, 1988). These distal and long-term assessments miss the residents' feelings and beliefs that are prerequisites to long-term revitalization success. We assert that individuals and small neighborhood groups ultimately control the success of revitalization. No revitalization scheme provides 100% funding to solve all problems. Instead, residents themselves must be convinced to revitalize their neighborhood by making financial and social investments in their homes and neighborhoods. The addition of new housing is thought to provide neighborhoods with residents having greater resources and, it is hoped, strong commitment to the neighborhood.

However, few evaluations exist to demonstrate these more social and psychological consequences of neighborhood revitalization efforts.

This study will assess what types of resources new residents bring to the neighborhood. New subdivision houses often cost more than the surrounding older houses, so new buyers will likely be wealthier than those moving to the surrounding neighborhood. New residents can be wealthier than surrounding residents even in the typical case where a certain percentage of new houses is reserved for residents with only a moderate income (i.e., residents who make 80% of the surrounding area median income). In the United States, households often require two adults to provide the earning potential needed to buy a home. New residents are therefore more likely to be married couples than residents moving to the surrounding, less expensive neighborhood. The new housing is also built to attract home buyers; consequently, the new residents to the subdivision are more likely to be home owners than new residents in the surrounding neighborhood. Thus, the new housing is expected to draw residents who may have the economic means and stability to provide noticeable investments in the neighborhood.

Although simply getting middle-class home owners to purchase or build homes in declining neighborhoods is deemed a vote of increased confidence, it is unclear how much that confidence is sustained once residents begin living in troubled parts of the city. Although new home buyers can generally be expected to be positive, it is less clear that this will also be the case when people buy homes in deteriorating neighborhoods. When new residents leave the immediate boundaries of their new subdivision, they may see evidence of decay, graffiti, and other incivilities. If newcomers are attracted to a neighborhood only because it offers relatively inexpensive housing, they may not develop the commitment to the neighborhood they would need to make enduring positive changes in the area. Under these circumstances, it is important to assess why residents bought their homes, how they experience their neighborhood after moving in, and what factors are related to their degree of neighborhood confidence and attachment.

#### CONFIDENCE AND REVITALIZATION

Housing experts generally agree that confidence in the future of the neighborhood is a key psychological prerequisite for neighborhood revitalization (Downs, 1981; Goetze, 1976; Goetze & Colton, 1980; Varady, 1986). Among residents of older housing, confidence is linked to several long-term revitalization goals such as residential stability (Varady, 1986) and home maintenance (Galster & Hesser, 1982). Conversely, low confidence may lead to disinvestments, especially by landlords and absentee owners (Goetze &

Colton, 1980). Disinvestment leads to a lowering of housing prices, which in turn attracts poorer residents to the area than the residents who leave the neighborhood. The tax base then decreases, subsequently lowering the funding for social programs, local schools, and maintenance. Thus, low confidence can trigger decreasing investments in the neighborhood, exacerbating decline.

Despite expert agreement that confidence is an important goal in revitalization programs, few studies actually assess confidence. The evaluation of the homesteading program mentioned above was one of the first studies that examined residents' perceptions as part of the revitalization program evaluation. However, the homesteading properties had negligible effects on surrounding residents' levels of confidence and upgrading (Varady, 1986). Again, revitalization efforts may have been spread too diffusely for residents to notice. This study focuses on confidence levels of those most affected by the new housing—the new residents. If new residents themselves do not experience confidence, surrounding neighbors are unlikely to as well.

#### PLACE ATTACHMENT AND REVITALIZATION

Place attachment can also be viewed as a strength that is related to several long-term revitalization outcomes. For example, greater attachment to an area predicts greater maintenance of a respondent's house (Galster & Hesser, 1982). Conversely, people who are not attached to a place, or who desire another place, form minimal investments and ties to their current surroundings (Vinsel, Brown, Altman, & Foss, 1980) and are more likely to move (Speare, 1974; Stokols & Shumaker, 1982; Vinsel et al., 1980). People who treat housing only as an investment (and have no place attachment) may overreact to cues of decline and extract what they can from their properties and leave (Goetze & Colton, 1980; Massey & Denton, 1993).

Place attachment provides psychological strengths that could help fuel long-term revitalization programs. Residents with high levels of place attachment may be willing to put in the hard work and sustained efforts needed for revitalization. In a study of landlord-abandoned housing in Harlem by Susan Saeger (1989), residents who expressed attachment refused to move despite threats of crime and seemingly unlivable conditions (one apartment complex had no heat or electricity for an entire winter). Despite these hardships, residents worked hard to create places they could be proud to live in. Thus, the concept of place attachment captures aspects of residential pride and commitment that may be vital to revitalization success.

**PREDICTORS OF PLACE ATTACHMENT AND CONFIDENCE**

We propose that certain perceptions and physical conditions are likely to predict residents' confidence in and attachment to their neighborhood. As suggested by previous research, the following are expected to be related to place attachment and confidence: low fear of crime, few perceived and observed incivilities, satisfactory neighborhood qualities and services, strong citizen participation, and certain resident social and individual characteristics. The relationship of each of these to place attachment and confidence is discussed in more detail below.

*Fear of crime.* Fear of crime undermines neighborhood confidence, creates disinvestment, and leads to (or accompanies) deterioration in the physical environment (Ahlbrandt, 1984; Hunter, 1978; Skogan, 1990; Taylor & Hale, 1986; Wilson & Kelling, 1982). Although few residents actually move due to fear of crime (Dubow, McCabe, & Kaplan, 1979), those who move from bad neighborhoods choose places they perceive to be safer, suggesting that fear is an important consideration when housing choices are made (Varady & Walker, 1999).

*Observed incivilities.* There is ample evidence that deteriorating physical conditions of housing and neighborhoods are associated with low neighborhood confidence (Goetze & Colton, 1980; Varady, 1986), lower residential satisfaction (Galster & Hesser, 1981; Lansing, Marans, & Zehner, 1970), intentions to move (Speare, 1974), and reductions in home maintenance (Ahlbrandt & Cunningham, 1979). In the neighborhood surrounding the new subdivision, an index of eight physical incivilities observed by trained raters was linked to lower place attachment and to crime victimization, with poor lawns and litter especially related to crime victimization (Brown, Perkins, & Brown, 2001; 2003). Although the new subdivision is expected to have few physical cues signaling decay (such as poor roof conditions or peeling paint), it may still be subject to physical disorder (e.g., poor lawns, litter, graffiti). Good physical appearances or the absence of incivilities may also facilitate social integration into the neighborhood and provide tangible evidence of and contribute to both place attachment (Harris & Brown, 1996) and confidence. In this study, trained observers assess whether the new housing does indeed show little evidence of decay and whether more transient incivilities such as bad lawns and litter are present and related to place attachment and confidence.



*Perceived incivilities.* Despite the objective measure of incivilities, it is also important to consider residents' subjective perceptions and reactions to these signs of physical decay, in addition to other perceived incivilities not captured by the observed incivilities measure. Perceived incivilities or cues of disorder include resident reports of high levels of graffiti, vandalism, or unkempt property in the neighborhood (see Taylor, 1999, for a review). Some residents are more sensitive to physical cues of disorder. Moreover, a measure of perceived incivilities also captures residents' perceptions of disorder that extends beyond observed physical conditions to include things such as loud neighbors, stray animals, or traffic problems. Theoretically, these incivilities become symbols to residents of neighborhood decay. When incivilities appear, residents lose confidence in the order-maintaining abilities of their neighbors or city officials. Individuals who perceive more incivilities have less confidence in the neighborhood (Taylor, Shumaker, & Gottfredson, 1985) and less community satisfaction and sense of community (Perkins, Florin, Rich, Wandersman, & Chavis, 1990). Residents show lower attachments to neighborhoods perceived as physically disorderly (McGuire, 1997) or deteriorated (LaGrange, Ferraro, & Supancic, 1992).

*Neighborhood qualities.* Several researchers have suggested that satisfactory public services (e.g., police protection, quality of streets and sidewalks) may be an important prerequisite for neighborhood confidence (Ahlbrandt & Brophy, 1975; Ahlbrandt & Cunningham, 1979; Goetze, 1976). Multiple studies have found that neighborhood qualities are as important as many housing characteristics when determining where to live (Bratt, 1983; Goetze, 1976; Kolodny, 1983). Consequently, we expect satisfaction with neighborhood qualities and services to predict confidence and place attachment.

*Citizen participation.* An individual's psychological investment in his or her neighborhood is associated with citizen participation (Saegert, 1989). Community involvement is important for maintaining and improving the neighborhood (Leavitt & Saegert, 1990; Schorr, 1997; Unger & Wandersman, 1985) and is more likely to thrive in upgrading neighborhoods (Clay, 1983). Research has linked community involvement with several revitalization-related outcomes such as community confidence (Varady, 1986), home maintenance (Galster & Hesser, 1982), and residential stability (Sampson, Raudenbush, & Earls, 1997). Citizen participation is assessed to test whether homebuyers in a new subdivision will become involved if the surrounding neighborhood is noticeably more distressed.

*Social and individual differences.* Older age (Brown & Perkins, 1996; Rowles, 1983) and female gender (Brown, 1987, for a review; Varady, 1986) have been shown to predict greater confidence and/or place attachment. In addition, if individual qualities such as marital status, race or ethnicity, and religious affiliation have any significant effects on confidence or place attachment, their effects will be statistically controlled.

In sum, the study will address these questions pertinent to revitalization programs that involve attracting new home owners to declining neighborhoods:

- (a) What type of residents move to the new subdivision and why do they move in?
- (b) Can low fear of crime, few perceived and observed incivilities, satisfaction with neighborhood qualities and services, and citizen participation (controlling for necessary social and individual differences) predict greater confidence and place attachment?
- (c) Do the new residents achieve levels of confidence and place attachment comparable to newcomers and old-timers in the surrounding neighborhood, after controlling for social and individual differences?

## METHOD

The site for this study is the newly constructed, 28-acre New West subdivision located on the west side of Salt Lake City (see Figure 1). The West Salt Lake area, developed primarily in the 1930s and 1950s, has been going through what many areas in cities across North America have also been experiencing: a decline in the inner city and first-ring suburbs. Household incomes, as indicated by 1970 to 1990 census data, dropped in the area from \$26,000 to \$19,000 (in constant 1989 dollars), despite a stable city average of \$29,000 (Salt Lake City Corporation, 1993). One fourth of Old West households were in poverty compared with 16% of all city households (Salt Lake City Corporation, 1993). The larger new subdivision replaced an abandoned school and business that had been an eyesore, for the neighborhood is sited in a way that preserves some open space for trails next to the river. It also provided new housing in a tight housing market, although at a lower density than the older housing in the surrounding neighborhood (generally 7,000 square foot lots compared to 5,000 square foot lots). The new subdivision itself is quite similar in design and appearance to a number of thriving subdivisions in the larger region, but the surrounding neighborhood has one of the highest levels of crime and poverty in the city. Additionally, when new residents

drive outside the immediate boundaries of their new subdivision, they will see much smaller houses on smaller lots, some with evidence of decay, graffiti, and other incivilities.

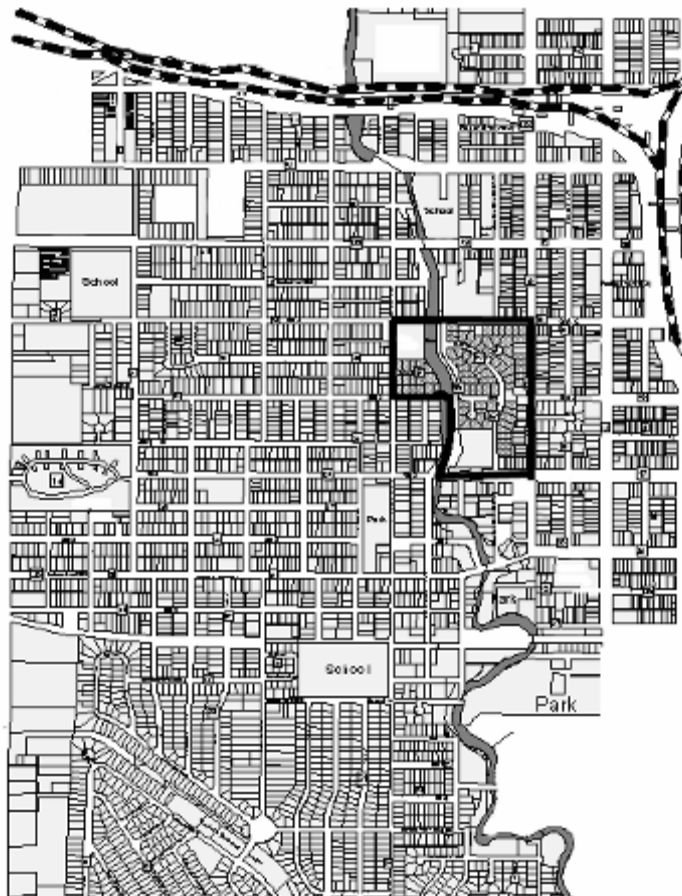
All 84 houses in the New West subdivision were rated by observers, and 56 residents were interviewed, a 67% completion rate. There were 12 refusals, 5 households were not interviewed because multilingual interviewers (who could speak Spanish and Asian languages) were not available, and 11 households were unavailable after eight attempted contacts.

The interview took approximately 30 minutes to complete and involved primarily closed-ended responses based on earlier research (Brown et al., 2001; Varady, 1986). Residents were asked about their streetblock (both sides of one street, as opposed to a square census block) and the larger Old West neighborhood. Interviews were initially conducted with the person who was 18 or older in the household and who had the most recent birthday, a procedure that provides an arbitrary selection of adult residents but avoids the intrusiveness of other random selection techniques that require an initial enumeration of all adults in the household (O'Rourke & Blair, 1983). However, due to the small sample size, within-household replacements were allowed if the target person was unable to do the interview. Substitutions were used in eight cases; analyses confirmed that the replacements were representative of the random sample on the major demographic variables (e.g., gender, religion, age, number of children, among others) and outcome variables. The data from the New West residents are contrasted with data collected approximately 3 years earlier from the 370 resident interviews and 480 property assessments in the Old West neighborhood.

#### VARIABLE DESCRIPTION

*Block confidence.* Confidence was measured by asking residents, "In the next 2 years, do you feel that general conditions on your block will get worse, stay about the same, or get better?" (a 3-point scale; Galster & Hesser, 1988).<sup>1</sup>

*Place attachment* (coefficient  $\alpha = .78$ ; five items). Attachments assessed residents' feelings about their neighborhood, their block, and their private properties. Residents reported how they would feel if they had to move to another neighborhood (possible responses were *very unhappy*, *a little unhappy*, *doesn't make any difference*, or *happy to move*) and how proud they were of the Old West area; attachment to and pride in their block; and pride in their private property (all 10-point scales).<sup>2</sup>



**Figure 1: New West Boundaries Are Indicated; New West Straddles a River and Is Surrounded by the Old West Neighborhood**

*Social and individual differences.* Initial analyses revealed that household size, number of children younger than 18, year born, marital status, income, and gender were unrelated to attachment and confidence and were dropped from further consideration. Initial correlations reported in Table 1 revealed that White non-Hispanics and those with Church of Jesus Christ of Latter Day Saints (LDS) religion were less confident and attached. Cross-tabulations

**TABLE 1**  
**Simple Correlations of Potential Predictors**

Variable	1	2	3	4	5	6	7
1. Confidence							
2. Place attachment	.40***						
3. Citizen participation	-.02	.05					
4. Neighborhood qualities	.40***	.30**	-.32**				
5. Fear of crime	-.35***	-.53***	.05	-.20			
6. Perceived incivilities	-.39***	-.36***	.12	-.25	.23		
7. White non-Hispanic	-.40***	-.33**	.45***	-.50***	.46***	.41***	
8. LDS religion	-.40***	-.16	.61***	-.47***	.39***	.25	.66***
9. Household size	-.01	.08	.20	-.11	-.19	-.06	-.11
10. No. of children in household	-.01	-.02	-.01	-.16	-.11	-.08	-.08
11. Year born	-.15	-.16	-.10	-.05	.09	.17	.14
12. Married	.21	.03	.26	.03	-.20	-.18	-.10
13. Income	-.17	-.04	.20	-.19	-.04	.07	.16
14. Male	.15	-.05	-.27**	.17	-.33**	-.23	-.36***
15. Litter	-.12	.05	-.18	.04	.05	.19	-.06
16. Garden	-.08	.05	.12	.03	-.15	-.11	-.14
17. Lawn	-.08	.04	.01	.08	-.09	-.33**	-.20

NOTE: LDS = Church of Jesus Christ of Latter Day Saints.

\*\* $p < .05$ . \*\*\* $p < .01$ .

revealed that race or ethnicity and religious affiliation were strongly correlated: 23 of 27 people who were LDS were also White non-Hispanic ( $r = .66$ ). To avoid multicollinearity problems, we retained only the variable White non-Hispanic for subsequent multiple regression analyses. We selected White because of its higher response rate, its significant correlation with both outcomes, and its prominence in past research.

*Citizen participation* ( $\alpha = .84$ ; 10 items). Residents reported their participation (1 = yes, 0 = no) either through attending meetings or working for five types of formal organizations: youth groups, religious groups, community councils, anticrime groups, and other groups.

*Perceived incivilities* ( $\alpha = .57$ ; eight items). Residents reported whether the block in the past 12 months has had neighbors who do not keep up their property or houses or places on the block where the resident suspects drug dealing occurs, houses on the block burglarized, or evidence of gang activity (1 = yes, 0 = no). Residents also rated, on a 10-point scale, the degree to which their block had experienced problems with graffiti, loud neighbors, traffic, and loose or stray dogs and cats.

*Fear of crime* ( $\alpha = .53$ ; two items) is a measure of the respondents' reported feelings of fear of crime at night on their block and, separately, in the neighborhood. Responses range from very unsafe to very safe on a 4-point scale.

*Neighborhood qualities* ( $\alpha = .71$ ; five items). Respondents used a 10-point scale to rate their satisfaction with police protection, nearby parks and playgrounds, condition of streets and sidewalks, housing quality, and housing affordability. Similar questions were asked concerning the availability of child care and quality of schools but were excluded from the composite because many residents did not judge these services (many could not judge them because they did not use local schools or child care).

*Observed incivilities.* The eight physical conditions that were important predictors of place attachment and crime in the surrounding neighborhood (Brown et al., 2001, 2003), and that provided reliably rated indexes in past research (Brown & Altman, 1983; Perkins et al., 1990; Perkins, Wandersman, Rich, & Taylor, 1993), were assessed for the new neighborhood. All ratings were conducted by two independent and trained students, and interrater reliability was high, ranging from .86 to 1.00. As expected, there was little evidence of decay in the neighborhood, with fewer than 5% of properties having bad roofs, broken windows, cracked brick or pavement, or peeling paint. There was no graffiti observed. A few properties had litter (15%) and a few had no vegetable or flower gardens (12.5%). The most problematic physical condition found was that 48.7% had lawns that were brown, unkempt, or weedy. We suspect poor lawns were due to a combination of the arid climate, the relatively new sod provided for the subdivision, and the soil compaction that accompanies building projects. Principal component and reliability analyses revealed that lawn conditions, litter, and gardens, the only incivility indicators with any variability, did not create an internally consistent composite variable. Because lawns, litter, and gardens were not correlated (alone or controlling for White non-Hispanic) with attachment or confidence, the observed incivilities are dropped from further analysis.

## RESULTS

### STRATEGY OF ANALYSES

After describing new residents and their motivations for moving to the subdivision, ordinary least squares (OLS) regression analyses tested whether

residents' levels of fear, perceived incivilities, citizen participation, and satisfaction with neighborhood services were related to confidence and place attachment. Composite variables are formed by averaging  $z$  scores of their individual items. A hierarchical multiple regression is used, entering the significant race or ethnicity demographic variable at Step 1, then testing whether the other factors can explain a significant amount of additional variance at Step 2. We use hierarchical linear regression because we are interested in the predictive value of fear of crime, perceived incivilities, neighborhood qualities, and citizen participation beyond what is explained by the individual or social characteristics of the residents. This is important, because we are interested in areas that policy initiatives can target without changing neighborhood composition. Confidence and place attachment are significantly correlated ( $r = .41, p < .01$ ) but not so highly correlated that they do not deserve to be treated as separate outcomes. Finally, OLS regressions test whether residents of New West have greater place attachment or confidence than residents of Old West.

When comparing New and Old West residents, it is important to separate Old West residents into recent and long-term residents. Recent Old West residents represent those recently entering the declining neighborhood. They can best illustrate the type of residents the neighborhood would attract absent special revitalization programs. Recent residents were people who had moved into Old West between 1993 and 1995 ( $n = 99$ ), dates chosen to create the same length of residence as for newcomers to New West. Long-term residents were people who had moved into Old West prior to 1993 ( $n = 271$ ). The responses from the Old West residents are prior to the New West subdivision being completed.

#### WHO ARE THE NEW RESIDENTS?

In keeping with the goal of the revitalization program to create home ownership opportunities, only one New West household was a renter, compared to 50% of recent and 80% of the long-term Old West residents. As expected, New West residents were more affluent than the surrounding area, with 60.7% of New West residents reporting a household income of more than \$43,000 (1997) dollars. In contrast, only 9.2% of recent and 13.6% of long-term Old West residents attained an income at that level (adjusted to equivalent 1997 dollars; Brown & Perkins, 2001). Despite their higher incomes, many New West residents were eligible for housing subsidies due to the higher cost of new housing, as discussed below. For New West respondents, 76.8% were married compared to only 41.2% of newcomers to the surrounding Old West neighborhood.



**TABLE 2**  
**Characteristics of New West and Old West (Recent and Long-Term) Residents**

<i>Variable</i>	<i>Value</i>	<i>New West (%)</i>	<i>Old West (Recent, %)</i>	<i>Old West (Long-Term, %)</i>
Homeowner	Owners	98.0	50.0	79.8
Income (1997 dollars)	< 16,200	5.4	19.5	17.7
	16,200-26,999	3.6	44.8	39.5
	27,000-43,200	30.4	26.2	29.2
	43,200 +	60.7	9.2	13.6
Marital status	Married	76.8	41.2	59.7
	Widowed		1.0	11.9
	Separated or divorced	14.3	33.0	13.8
	Never married	7.1	20.6	12.3
Race/ethnicity	White non-Hispanic	60.0	60.0	69.2
	Asian	23.6	2.1	2.3
	Hispanic	12.7	33.7	23.1
	Other	3.6	4.3	5.4
Religion	LDS	57.1	28.0	51.6
	Catholic	14.3	32.3	22.4
	Protestant	2.0	8.6	4.8
	Other or none	26.5	31.2	19.6

NOTE: LDS = Church of Jesus Christ of Latter Day Saints. The income of Old West residents was measured 4 years earlier, so it was adjusted for inflation using the Consumer Price Index (*Statistical Abstracts*, 1998).

The neighborhood continues to be ethnically diverse. In this study, 40% of New West residents were ethnic minorities (see Table 2), primarily Asian (23.6%) and Hispanic (12.7%). The mean age of the respondents was 36 for both newcomers to New and Old West. Nearly half of the New West respondents identified their religious beliefs as being LDS, which is slightly higher than the surrounding area. New residents have also shown a modest level of attending formal organizations in the neighborhood, including religious groups (37%), community councils (34%), youth groups (29%), other groups (25%), and anticrime groups (18%).

#### WHAT ATTRACTS NEW RESIDENTS TO A DECLINING NEIGHBORHOOD?

The results show that perceived housing affordability was the primary reason for moving into New West (see Table 3). In fact, more than 96% of the sample cited affordable housing as a reason for choosing New West as a place to live. Half said that it was the main reason (out of eight choices) for moving



**TABLE 3**  
**Reasons for Moving to New West (n = 56)**

<i>Reason</i>	<i>% Cited as Reason</i>	<i>% Cited as Main Reason</i>
Affordable housing	96	52
Convenience to job	75	19
Housing subsidy available	41	15
Available shopping	36	0
Friends or relatives nearby	30	6
Ethnic diversity	30	2
Convenience to public transport	25	0
Good schools	21	7

to New West. Furthermore, many families were able to make use of second loan financing, a package provided by the city to help families purchase a home if they were moderate income—making 80% or less of area median income. Of the 56 respondents, 55% said they had made use of some type of special loan financing beyond conventional financing, and 41% cited subsidies as a reason they moved to the subdivision. The second most important (and oft cited) reason for moving to New West was convenience to job, which is often considered an advantage urban neighborhoods have over suburban ones. Less frequently endorsed reasons included shopping availability, proximity to friends or family, and ethnic diversity, cited by 30% or more. Although ethnic diversity was n

ot a major reason for moving to the subdivision, it still was cited as an attraction by a substantial minority of residents, suggesting that diversity is valued by these in-movers.

#### PREDICTORS OF CONFIDENCE

White non-Hispanic residents are less confident in the neighborhood, according to Step 1 of the OLS regression. This predictor alone explains 14% of the variance (adjusted  $R^2$ ) in confidence,  $F(1, 52) = 9.88, p < .01$  (see Table 4). In Step 2, residents who perceive few incivilities and those who are satisfied with neighborhood services and features are more confident. Although simple correlations showed that White non-Hispanics and those with high fear of crime were also less confident, neither variable added significant unique explanatory variance in the full model. The four predictors in Step 2 explained an additional 17% of variance; the unadjusted  $R^2$  increased from .16 to .33,  $F$  change (4, 48) = 3.08,  $p < .05$ . The overall model is also significant,  $F(5, 48) = 4.76, p < .01$  (multiple  $R = .58$ ; adjusted  $R^2 = .33$ ). In sum, significant unique predictors show those residents who perceive fewer incivil-

**TABLE 4**  
**Confidence and Place Attachment: Hierarchical Multiple Regression Results**

Step	Variable	Confidence			Place Attachment				
		B	SE B	$\beta$	r	B	SE B	$\beta$	r
1	White non-Hispanic	-.58	.18	-.40***	-.40***	-.48	.19	-.33**	-.33**
2	White non-Hispanic	-.23	.25	-.16	-.40***	-.01	.24	-.01	-.33**
	Citizen participation	.19	.14	.18	-.02	.18	.14	.17	.05
	Neighborhood qualities	.30	.14	.29**	.40***	.21	.14	.20	.30**
	Fear of crime	-.15	.12	-.18	-.35***	-.39	.11	-.44***	-.53***
	Perceived incivilities	-.34	.19	-.24*	-.39***	-.33	.18	-.22*	-.36***

\* $p < .10$ . \*\* $p < .05$ . \*\*\* $p < .01$ .

ties (e.g., unkempt properties, gang activity, traffic problems) and those who are more satisfied with a range of neighborhood qualities and features (e.g., police, sidewalks) express more confidence.

#### PREDICTORS OF PLACE ATTACHMENT

White non-Hispanic residents also report less place attachment according to Step 1 of the OLS regression. This variable alone explains 11% of the variance (unadjusted  $R^2$ ) in place attachment,  $F(1, 52) = 6.22, p < .05$ . In Step 2, residents with less fear of crime and who perceive fewer incivilities report higher levels of place attachment. Although simple correlations show that White non-Hispanics and those who are less satisfied with neighborhood services and features also had lower place attachment, these predictors did not add significant unique explanatory variance in the full model. The four predictors in Step 2 explained an additional 28% of variance, the unadjusted  $R^2$  increased from .11 to .39,  $F$  change (4, 48) = 5.44,  $p < .001$ . The full model was also significant,  $F(5, 48) = 6.03, p < .001$  (multiple  $R = .62$ , adjusted  $R^2 = .32$ ). In sum, significant unique predictors show that residents with less fear of crime and those who perceive fewer incivilities report stronger place attachment.

#### CONFIDENCE AND PLACE ATTACHMENT FOR NEW WEST AND OLD WEST RESIDENTS

In general, New West residents are somewhat more confident (2.42 on a 3-point scale) than recent (2.09) and long-term (2.01) Old West residents (see Table 5). To test whether these differences are significant when individual and social characteristics are controlled, a regression analysis was conducted<sup>3</sup> with controls for age, income, being LDS, being married, and being White non-Hispanic (gender and number of children were excluded due to insignificant correlations with outcomes and dummy variables). Results showed that New West residents expressed significantly higher confidence than recent Old West residents,  $\beta = .385, p < .001$ ,  $F$  change over control variables (1, 135) = 11.86,  $p < .001$ ; and long-term Old West residents,  $\beta = .276, p < .001$ ,  $F$  change over control variables (1, 292) = 17.445,  $p < .001$ .

Similarly, New West residents expressed high levels of place attachment as indicated by their responses to questions of attachment and pride. On several items, New West residents actually scored higher than Old West residents. However, after controlling for age, income, LDS religion, marital status, and being White non-Hispanic, New West residents did not experience greater place attachment than long-term Old West residents,  $\beta = .028$ ,

**TABLE 5**  
**Confidence and Place Attachment Means: Old and New West**

Variable	Range	M	SD	New West		Old West	
				Recent		Long-Term	
				M	SD	M	SD
Confidence: Block will improve	1-3	2.42	0.71	2.09	0.77	2.01	0.75
Place attachment composite	1-10	7.10	1.58	6.11	2.15	7.03	1.86
Pride in Old West	1-10	6.26	2.24	5.67	2.76	6.45	2.59
Block attachment	1-10	6.76	2.63	6.08	3.06	7.35	2.83
Pride in block	1-10	8.00	1.82	5.75	2.75	6.83	2.44
Pride in house	1-10	8.30	1.68	7.37	2.64	8.16	2.29
Pride in yard appearance	1-10	7.38	2.42	6.87	2.45	7.90	2.19
Pride in exterior appearance	1-10	8.32	1.87	6.53	2.8	7.73	2.25
Unhappy to move	1-4	2.52	1.06	2.53	1.09	2.61	1.14

$p > .25$ ,  $F$  change over control variables (1, 292) = .205, *ns*. However, they did experience more place attachment than recent Old West residents,  $\beta = .233$ ,  $p < .05$ ,  $F$  change over control variables (1, 135) = 4.861,  $p = .029$ .<sup>4</sup>

## DISCUSSION

Who are these revitalizing pioneers? Largely, they are drawn to the area because of the perceived housing affordability, convenience to job, and the availability of housing subsidies (primarily second loan financing and grants by the city). A substantial fraction was attracted to ethnic diversity in the area, but the most important attraction was perceived housing affordability. Economic motives for moving in do not necessarily lead to place attachment and confidence in one's neighborhood. Nevertheless, new residents in New West, compared with both newcomers and old-timers in the larger neighborhood, reported higher levels of confidence about the future of their block. They also had higher levels of place attachment than people who had recently moved into the surrounding Old West neighborhood.

Although long-term residence often creates stronger place attachments (Kasarda & Janowitz, 1974; Saegert, 1989), the new housing provided a place where new residents could quickly establish place attachments that rivaled those of long-term surrounding neighbors in Old West. These strong attachments bode well for the ongoing revitalization of this area and for policies that create new subdivisions in deteriorating neighborhoods, such as Homeownership Zones or HOPE VI mixed-income housing developments.

When predictors are combined in the regression equations, place attachment and confidence have both common and distinct predictors. Residents who perceived few incivilities felt confident and attached. These results confirm previous suggestions that perceived sense of control over an area is often an important consideration for developing a deep sense of trust in and identity with a place (Brown, 1987). When residents perceive litter, graffiti, gang activity, and run-down housing, it may suggest that residents are not in control of the neighborhood and they cannot maintain neighborhood standards for order and safety. In this study it is notable that perceived incivilities were associated with lower confidence and attachment, despite generally good physical conditions. Although fear of crime is a significant multivariate predictor of place attachment, not confidence, simple correlations show that fear of crime also is related to lower levels of place attachment and confidence ( $r = -.53$  and  $-.35$ , respectively). Moreover, when the two items composing fear of crime are examined separately, residents reveal that fear of the surrounding neighborhood, not just one's immediate block, relates to place attachment and confidence. Place attachment and confidence are more strongly correlated with low fear of crime on the block ( $r = -.54, p < .01$  and  $r = -.30, p < .05$ ), but they are also correlated with low fear of crime in the larger neighborhood ( $r = -.32, p < .05$  and  $r = -.27, p = .052$ ). This suggests that significant fear of crime at either block or neighborhood level can undermine place attachment and confidence.

In the multivariate equation, satisfactory neighborhood conditions, such as good parks, sidewalks, and police services, are better predictors of confidence in the future of the block than of place attachment. Conversely, fear of crime is a better unique predictor of place attachment than confidence. This suggests that past revitalization studies that focused on confidence as an outcome overlooked the importance of crime concerns in revitalization, because they ignored its impact on place attachment. Although confidence is the more traditional outcome variable in revitalization studies, few would argue against the inclusion of fear of crime as a predictor of confidence or place attachment in a revitalization model. By adopting multiple indicators, researchers develop a better understanding and gain insight to the complex issue of revitalization. Place attachment is a strong psychological bond that may encourage revitalization among existing residents. Residents who are attached to but not confident in their neighborhood may be willing to work toward neighborhood revitalization if they are provided with resources (Saegert, 1989). Alternatively, residents who are confident but not attached may still leave or may fail to provide a range of resources beyond housing that could help with revitalization. Whether New West residents are committed over the long term to live in New West or use it as a stepping-stone to move upward remains to be

seen. Hope for the former is reasonable, however. Although the New West residents moved in for economic reasons, they have quickly developed strong attachment and confidence in the area that may translate into a long-term revitalization resource.

The physical conditions of this neighborhood were generally good, and physical conditions were unrelated to confidence and place attachment. The lack of relationship between physical conditions and resident confidence or attachment may reflect a ceiling effect in which the generally good conditions of the new housing cannot predict confidence or place attachment. In the surrounding neighborhood and in other declining neighborhoods where physical conditions are more variable and include poor conditions, good conditions may be more important predictors of attachment and confidence. Moreover, improving physical conditions in these areas may make more of a difference. For example, landscaping formerly barren areas of public housing is associated with residents perceiving greater safety (Kuo, Bacaicoa, & Sullivan, 1998), more neighborhood commitment (Coley, Kuo, & Sullivan, 1997), and less crime (Kuo et al., 1998). Future research is needed to determine when visible conditions of neighborhood decline create problems for residents' experiences of their neighborhood.

Although citizen participation in formal neighborhood groups also did not predict confidence or place attachment, such participation has been a key part of confidence and attachment in other settings or at other times (Kolodny, 1983; Saegert, 1989). Recall that these residents were relatively new, and their formal participation may eventually begin to support or reflect their sense of place attachment or confidence. Also, these newcomers may learn very quickly about neighborhood problems in the course of participating in youth and anticrime groups, for example. Therefore, the role that formal organizations play in creating concerns or reassurance for newcomers deserves greater attention.

Compared to non-Hispanic Whites, other residents were consistently more confident, attached, and rated neighborhood qualities higher (see Table 1)<sup>5</sup>. Non-Hispanic Whites expressed more fear of crime, perceived more incivilities, and participated more in formal organizations. Because the non-Hispanic White variable was no longer significant at Step 2 of the regression equation, its effects are largely accounted for by the attitudinal variables. Perhaps non-Whites and Hispanics, due to a history of discrimination, had lower expectations for the neighborhood and appreciated it more once they moved in. Perhaps non-Hispanic Whites were especially sensitive to perceived problems in the neighborhood. Regardless of the reason, the non-Whites and Hispanics should be seen as potentially valuable partners for future revitalization efforts in this area, as they have the strongest positive regard for the

neighborhood. This source of strength might be developed for the benefit of the neighborhood at large. Unfortunately, in order to translate the confidence and place attachment of non-Whites and Hispanics into a benefit for the larger neighborhood, new forms of formal participation may be needed. Non-Whites and Hispanics who feel strong confidence and attachment do not participate as much in formal organizations. White non-Hispanics do participate in formal organizations but feel no benefit from their participation in the form of higher confidence or place attachment. In the future, neighborhood revitalizers may want to cultivate more formal participation opportunities that allow the positive bonds of the new residents, especially the strong bonds of non-White and Hispanic residents, to contribute to larger revitalization goals.

This field study has limitations that should be kept in mind. It emphasized self-report data, although objective observations were used to verify the condition of the physical environment. The sample of new residents is small, limiting statistical power, and the design is cross sectional. If data were available, it would be possible to determine whether the model variables predict place attachment and confidence over time. Yet the social and economic significance of revitalization, and especially the failure of revitalization, is so great that revitalization research is important to conduct, despite the limitations inherent in any one study.

This study argues that it is important to understand how revitalization processes unfold over time in the feelings and behaviors of residents. Previous studies assess revitalization effects on rather distant outcomes, such as property values or investment. In contrast, this study proposes that a new housing intervention creates an immediate difference in the neighborhood because both the new residents and new homes differ from other residents and homes in the neighborhood. These new residents develop more positive attitudes about the area, which may lead to efforts that ultimately enhance the neighborhood. Their confidence, place attachment, and other behaviors may energize the surrounding neighborhood in ways that alter the social and psychological trajectory of the neighborhood. This human dimension to neighborhood change processes has not been captured in prior research. Future research needs to address how new residents, who are the "revitalization resources," and the old residents come to implement and understand changes in the neighborhood. Some of the residents interviewed in Old West were concerned that the new subdivision would increase their taxes and possibly drive them out. This fear reflects concerns of gentrification, a distinct possibility in efforts to revitalize neighborhoods. Gentrification can threaten residents if it displaces poorer people rather than accommodating them in a mixed-income neighborhood. However, to this date, these concerns have not

been realized. On the other hand, there is also a potential ill feeling when Old West residents resent the housing opportunity provided to New West residents. These are all issues that will require further scrutiny in follow-up analyses and similar types of projects. It is also important to remember that new subdivisions constitute only one piece of a neighborhood's revitalization needs. A balanced revitalization policy would avoid the extremes of either gentrification, where only wealthy people can afford the neighborhood, or poverty concentration, where neighborhoods concentrate the poorest and most needy. New housing provides new resources to the neighborhood but does not solve all neighborhood needs or provide housing for people with the entire range of economic needs. New subdivisions are likely to be more effective when coupled with additional resources to effectively complement and build on the initial investment. In fact, these complementary investments may actually be more important than the housing investment (Carmon & Baron, 1993). As in the Bronx (Schorr, 1997), cities need to reinforce the initial program with continued efforts. In this neighborhood, efforts should focus on reducing perceived incivilities, which in turn may improve residents' confidence in and attachment to their neighborhood. Similarly, better services may enhance confidence, and reductions in fear of crime may improve residents' attachments to the area. Through efforts to increase confidence and place attachment, residential stability is likely to increase (Varady, 1986), thereby increasing the proportion of home owners to renters and further supporting the revitalization of the neighborhood (Hollister et al., 1978; Orlebeke, 1997).

Is New West a success? One goal of providing new home ownership opportunities is to reverse trends toward declining economic resources among residents in declining neighborhoods. By this criterion, New West is a success, attracting higher income residents to home ownership opportunities. Five times as many New West residents made over \$43,000 yearly compared to newcomers in the surrounding neighborhood. All but one of the New West residents interviewed was a home owner, compared to 50% of newcomers in Old West. More residents of New West are also married. The area continues to be ethnically diverse, but there were proportionally more Asians and fewer Hispanics in New West than Old West. Most important, these new residents to New West express greater confidence than Old West residents and more attachment than recent Old West residents. The majority (54.5%) also believed their block would improve over the next 2 years. All of these indicators suggest that the new residents both constitute and will contribute to neighborhood revitalization. Comprehensive neighborhood revitalization efforts must also address the needs for services, affordable housing for renters, and other essentials. As one step toward this complex array of factors



needed for neighborhood revitalization, the New West subdivision provides a much-needed visible success.

### NOTES

1. A more complex measure of confidence that takes into account current satisfaction levels was also tried, but results show the simpler measure used in this study has greater variability and predictive ability.

2. Three items measuring pride in their house, pride in the way their front yard looked, and pride in the way the outside of their house looked were aggregated to form one measure of pride in private property. This was done to create three geographic levels of scale (the larger neighborhood, the block, and one's house) in which residents may experience place attachment and confidence.

3. We examined the relationship between home ownership and confidence but found a nonsignificant relationship between owning a home and confidence among recent Old West residents ( $r = .07, p > .10$ ). This supports the idea that the differences in confidence levels between New West residents and new Old West residents are more than just the fact that New West has a higher proportion of homeowners.

4. Equation for New West versus recent Old West for confidence =  $-.085$  Year born  $-.157$  LDS  $-.068$  Married  $-.159$  Income  $-.065$  White  $+.385$  New West; for place attachment =  $-.414$  Year born  $-.020$  LDS  $+.033$  Married  $-.175$  White  $+.004$  Income  $+.233$  New West; for the comparison between New West and long-term Old West residents, confidence =  $-.134$  Year born  $-.068$  LDS  $-.008$  Married  $-.088$  White  $-.058$  Income  $+.276$  New West; place attachment =  $-.400$  Year Born  $+.050$  LDS  $+.076$  Married  $-.191$  White  $+.111$  Income  $+.028$  New West.

5. Within a small sample, it is risky to seek differences across the non-White and Hispanic groups. However, all such groups except one had higher place attachment and confidence scores than White non-Hispanic. The one exception was the sole Pacific Islander, who had higher place attachment but not confidence. Therefore, high confidence and attachment levels characterize Asians, Hispanics, and Native Americans; there were no African Americans in the New West sample. The major Hispanic group in Utah is Mexican. Because the major differences are between White non-Hispanics and all other groups, we retain this dummy variable to represent the major effect of race or ethnicity.

### REFERENCES

- Ahlbrandt, R. S. (1984). *Neighborhoods, people, and community*. New York: Plenum.
- Ahlbrandt, R. S., & Brophy, P. C. (1975). *Neighborhood revitalization*. Lexington, MA: Lexington Books.
- Ahlbrandt, R. S., & Cunningham, J. V. (1979). *A new public policy for neighborhood preservation*. New York: Praeger.
- Bratt, R. (1983). People and their neighborhoods: Attitudes and policy implications. In P. Clay and R. Hollister (Eds.), *Neighborhood policy and planning* (pp. 133-150). Lexington, MA: Lexington Books.

- Brown, B. B. (1987). Territoriality. In D. Stokols & I. Altman (Eds.), *Handbook of environmental psychology, Vol. 2* (pp. 505-531). New York: Wiley.
- Brown, B. B., & Altman, I. (1983). Territoriality, defensible space and residential burglary: An environmental analysis. *Journal of Environmental Psychology, 3*, 203-220.
- Brown, B. B., & Perkins, D. D. (1996, July-August). *Neighborhood revitalization: Socio-environmental indicators and needs*. Paper presented at the 14th Conference of the International Association for People-Environment Studies, Stockholm, Sweden.
- Brown, B. B., & Perkins, D. D. (2001). *Executive summary: Neighborhood revitalization & disorder: An intervention evaluation*. Washington, DC: National Institute of Justice.
- Brown, B. B., Perkins, D. D., & Brown, G. (2001). *Incivilities, place attachment and crime: Block and individual effects*. Manuscript submitted for publication.
- Brown, B. B., Perkins, D. D., & Brown, G. (2003). *Place attachment in a revitalizing neighborhood: Individual and block levels of analysis*. *Journal of Environmental Psychology, 23*, 259-271.
- Carmon, N., & Baron, M. (1993). Reducing inequality by means of neighbourhood rehabilitation: An Israeli experiment and its lessons. *Urban Studies, 31*(9), 1465-1479.
- Clay, P. (1979). *Neighborhood renewal: Middle class resettlement and incumbent upgrading in American neighborhoods*. Lexington, MA: Heath.
- Clay, P. L. (1983). Urban reinvestment: Process and trends. In P. Clay and R. Hollister (Eds.), *Neighborhood policy and planning* (pp. 21-33). Lexington, MA: Lexington Books.
- Coley, R. Kuo, F. E., & Sullivan, W. C. (1997). Where does community grow? The social context created by nature in urban public housing. *Environment and Behavior, 29*(4), 468-494.
- DeGiovanni, F. F. (1984). An examination of selected consequences of revitalization in six U.S. cities. In J. J. Palen & B. London (Eds.), *Gentrification, displacement, and neighborhood revitalization* (pp. 67-89). Albany: State University of New York Press.
- Downs, A. (1981). *Neighborhoods and urban development*. Washington, DC: Brookings Institute.
- DuBow, F., McCabe, E., & Kaplan, G. (1979). *Reactions to crime: A critical review of the literature*. Washington, DC: National Institute of Justice.
- Fainstein, S. S., & Hirst, C. (1996). Neighborhood organizations and community planning: The Minneapolis neighborhood revitalization program. In W. D. Keating, N. Kumholz, & P. Star (Eds.), *Revitalizing urban neighborhoods* (pp. 97-111). Lawrence: University Press of Kansas.
- Fischer, C. S. (1982). *To dwell among friends*. Chicago: University of Chicago Press.
- Galster, G. C., & Hesser, G. W. (1981). Residential satisfaction: Compositional and contextual correlates. *Environment and Behavior, 13*(6), 735-758.
- Galster, G. C., & Hesser, G. W. (1982). The social neighborhood: An unspecified factor in homeowner maintenance? *Urban Affairs Quarterly, 18*(2), 235-254.
- Galster, G. C., & Hesser, G. W. (1988). Evaluating and redesigning subsidy policies for home rehabilitation. *Policy Sciences, 21*, 67-95.
- Goetz, E. G. (1997). Sandtown-Winchester, Baltimore: Housing as community development. In W. Van Vliet (Ed.), *Affordable housing and urban redevelopment in the United States* (pp. 187-209). Thousand Oaks, CA: Sage.
- Goetze, R. (1976). *Building neighborhood confidence: A humanistic strategy for urban housing*. Cambridge, MA: Ballinger.
- Goetze, R. (1979). *Understanding neighborhood change: The role of expectations in urban revitalization*. Cambridge, MA: Ballinger.
- Goetze, R., & Colton, K. W. (1980). The dynamics of neighborhoods: A fresh approach to understanding housing and neighborhood change. In P. L. Clay & R. M. Hollister (Eds.), *Neighborhood policy and planning* (pp. 57-76). Lexington, MA: Lexington Books.

- Harris, P. B., & Brown, B. B. (1996). The home and identity display: Interpreting resident territoriality from home exteriors. *Journal of Environmental Psychology, 16*, 187-203.
- Hollister, R. M., Auger, D., Walter, A. R., & Pattison, T. (1978). *Measuring neighborhood confidence*. Cambridge: MIT, Department of Urban Studies.
- Hunter, A. (1978, November). *Symbols of incivility*. Paper presented at the annual meeting of the American Society of Criminology, Dallas, TX.
- Kasarda, J. D., & Janowitz, M. (1974). Community attachment in mass society. *American Sociological Review, 39*, 328-339.
- Kolodny, R. (1983). Some policy implications of theories of neighborhood change. In P. Clay & R. Hollister (Eds.), *Neighborhood policy and planning* (pp. 93-110). Lexington, MA: Lexington Books.
- Kromer, J. (2000). *Neighborhood recovery: Reinvestment policy for the new hometown*. New Brunswick, NJ: Rutgers.
- Kuo, F. E., Bacaicoa, M., & Sullivan, W. C. (1998). Transforming inner-city landscapes: Trees, sense of safety, and preference. *Environment and Behavior, 30*(1), 28-59.
- LaGrange, R. L., Ferraro, K. F., & Supancic, M. (1992). Perceived risk and fear of crime: Role of social and physical incivilities. *Journal of Research in Crime and Delinquency, 29*, 311-334.
- Lansing, J., Marans, R., & Zehner, R. (1970). *Planned residential environments*. Ann Arbor: University of Michigan, Institute for Social Research.
- Leavitt, J., & Saegert, S. (1990). *From abandonment to hope: Community-households in Harlem*. New York: Columbia University Press.
- Massey, D. S., & Denton, N. A. (1993). *American apartheid: Segregation and the making of the underclass*. Cambridge, MA: Harvard University Press.
- McGuire, K. B. (1997). The reliability and validity of a questionnaire describing neighborhood characteristics relevant to families and young children living in urban areas. *Journal of Community Psychology, 25*, 551-566.
- O'Rourke, D., & Blair, J. (1983). Improving random respondent selection in telephone surveys. *Journal of Marketing Research, 20*, 428-432.
- Orlebeke, C. J. (1997). *New life at ground zero: New York, home ownership, and the future of American cities*. Albany, NY: Rockefeller Institute Press.
- Perkins, D. D., Florin, P., Rich, R. C., Wandersman, A., & Chavis, D. M. (1990). Participation and the social and physical environment of residential street blocks: Crime and community context. *American Journal of Community Psychology, 18*, 83-115.
- Perkins, D. D., Wandersman, A., Rich, R. C., & Taylor, R. B. (1993). The physical environment of street crime: Defensible space, territoriality, and incivilities. *Journal of Environmental Psychology, 13*, 29-49.
- Rohe, W. M., & Stegman, M. A. (1994). The effects of homeownership on the self-esteem, perceived control, and life satisfaction of low-income people. *Journal of the American Planning Association, 60*, 173-185.
- Rohe, W. M., & Stewart, L. S. (1996). Homeownership and neighborhood stability. *Housing Policy Debate, 7*, 37-80.
- Rossi, P. H., & Weber, E. (1996). The social benefits of homeownership: Empirical evidence from national surveys. *Housing Policy Debate, 7*, 1-35.
- Rowles, G. D. (1983). Place and personal identity in old age: Observations from Appalachia. *Journal of Environmental Psychology, 3*(4), 299-313.
- Saegert, S. (1989). Unlikely leaders, extreme circumstances: Older Black women building community households. *American Journal of Community Psychology, 17*(3), 295-316.
- Salt Lake City Corporation. (1993). *West Salt Lake community master plan*. Salt Lake City, UT: Community and Economic Development Department, Planning Division.

- Sampson, R. J., Raudenbush, S. W., & Earls, F. (1997, August 15). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science*, 277, 918-924.
- Schorr, L. B. (1997). *Common purpose: Strengthening families and neighborhoods to rebuild America*. New York: Anchor.
- Skogan, W. G. (1990). *Disorder and decline*. New York: Free Press.
- South, S. J., & Crowder, K. D. (1997). Escaping distressed neighborhoods: Individual, community, and metropolitan influences. *American Journal of Sociology*, 102, 1040-1084.
- Speare, A., Jr. (1974). Residential satisfaction as an intervening variable in residential mobility. *Demography*, 11(2), 173-188.
- Statistical abstracts*. (1998). Washington, DC: U.S. Bureau of the Census.
- Stokols, D., & Shumaker, S. A. (1982). The psychological context of residential mobility and well-being. *Journal of Social Issues*, 38(3), 149-171.
- Taylor, R. B. (1999). The incivilities thesis: Theory, measurement, and policy. In R. H. Langworthy (Ed.), *Measuring what matters* (pp. 65-88). Washington, DC: U.S. Department of Justice, National Institute of Justice, Office of Community Oriented Policing Services.
- Taylor, R. B., & Hale, M. (1986). Testing alternative models of fear of crime. *Journal of Criminal Law and Criminology*, 77, 151-189.
- Taylor, R. B., Shumaker, S. A., & Gottfredson, S. D. (1985). Neighborhood-level links between physical features and local sentiments: Deterioration, fear of crime, and confidence. *Journal of Architectural Planning and Research*, 2, 261-275.
- Unger, D. G., & Wandersman, A. (1982). Neighboring in an urban environment. *American Journal of Community Psychology*, 10(5), 493-509.
- Unger, D. G., & Wandersman, A. (1985). The importance of neighbors: The social, cognitive, and affective components of neighboring. *American Journal of Community Psychology*, 13, 139-169.
- U.S. Department of Housing and Urban Development. (1978). *Revitalizing North American neighborhoods: A comparison of Canadian and U.S. programs for neighborhood preservation and housing rehabilitation* (HUD Publication No. 502-PDR). Washington, DC: D. Carlson.
- U.S. Department of Housing and Urban Development. (1996). *New American neighborhoods: Building homeownership zones to revitalize our nation's communities*. Washington, DC: Author. Retrieved from <http://www.huduser.org/publications/pdf/new.pdf>
- Varady, D. P. (1986). Neighborhood confidence: A critical factor in neighborhood revitalization? *Environment and Behavior*, 18(4), 480-501.
- Varady, D. P., & Walker, C. C. (1999). Vouchering out distressed subsidized developments: Does moving lead to enhanced feelings of safety? *Environment and Behavior*, 31, 3-27.
- Vinsel, A., Brown, B. B., Altman, I., & Foss, C. (1980). Privacy regulation, territorial displays, and effectiveness of individual functioning. *Journal of Personality and Social Psychology*, 39, 1104-1115.
- Wilson, J. Q., & Kelling, G. L. (1982, March). Broken windows. *Atlantic Monthly*, 249, 29-38.