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## Rural mountain natives, in-migrants, and the cultural divide

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### Abstract

Conventional wisdom suggests that different views held by native and in-migrant rural residents lead to a division that ultimately damages community. Using a sample of rural residents in the Southern Appalachian Mountains, we seek to (1) determine whether these groups differ and, if they do, (2) explain the predictors of the difference. Our results suggest that there are demographic and attitudinal differences between natives and in-migrants, although a significant number of in-migrants share native attitudes. Proportion of lifetime spent in the region and perception of threat to cultural heritage play important roles in determining shared attitudes among the groups, implying that natives and in-migrants may not be as different as previously assumed and that in-migrant status by itself may not be sufficient to explain changes in rural community.

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Rural areas have experienced significant growth due to increased in-migration in recent years, reflecting many people's desires to escape growing patterns of urbanization and suburbanization in the United States (Beale & Johnson, 1998; Beyers & Nelson, 2000; Fuguitt, Beale, Fulton, & Gibson, 1998; Jobs, 2000; Johnson & Beale, 1994, 1998; Salamon, 2003). Much of this growth can be attributed to the influence of the baby boom generation (Nelson & Sewall, 2003; Nelson, Nicholson, & Stege, 2004). Southern Appalachia has been no exception to this pattern of growth. From 1995 to 2000, approximately 63,000 more people immigrated into North Carolina's Appalachian counties than left them (Pollard, 2005).

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What does this demographic shift mean for the state of rural community? Traditional viewpoints suggest that rural in-migrants hold different social and cultural values and views than native rural residents, leading to a division between the groups. Social psychologists have long known that when a close-knit group faces outside infiltration, group members may perceive the outsiders as a threat to group solidarity. Until now, we have had little evidence to suggest whether a divide is present in rural mountain communities. In this paper, we address whether in-migrant social and political views differ significantly from native views and, if they do differ, whether time spent in the region decreases differences between native and in-migrant views.

### **1. Culture clash in the rural community**

During the past several decades, communities on the rural–urban fringe have experienced a pronounced influx of upwardly mobile and, more recently, younger populations (Beale & Johnson, 1998; Fuguitt et al., 1998; Jobes, 2000; Johnson & Beale, 1998; Jones, Fly, Talley, & Cordell, 2003; Salamon, 2003). Attracted to scenic beauty, recreation possibilities, lower population densities, and clean environment, many in-migrants see rural communities as an alternative to the negative effects of urban and suburban sprawl (Bridger, Luloff, & Krannich, 2002). Although quality-of-life considerations top the list of reasons for the move to rural areas, rural communities also have more to offer economically than in the past, particularly for those residents who can afford to live in a rural community and commute to work in nearby areas (Jobes, 2000; Jones et al., 2003; Reichert & Sylvester, 1997; Salamon, 2003).

While the potential benefits of rural areas to newcomers seem apparent, the effects on rural natives are questionable. Research on rural in-migration is a testament to this, often focusing on factors underlying community conflicts with the expectation that in-migrant and native rural residents hold differing attitudes and values—a “culture clash” thesis of rural community interaction in which the values and attitudes brought by rural in-migrants are expected to pose a threat to the established native community (Jones et al., 2003; Price & Clay, 1980).

An underlying assumption of the culture clash thesis is that community solidarity is undermined by the unwillingness of natives to accept newcomers into the community and/or the unwillingness of in-migrants to become a part of the community (Salamon, 2003). This unwillingness generally stems from sources of difference between the groups—differences related to identity, cultural expectations, social and political viewpoints, or socioeconomic status.

According to social identity theory, people make comparisons between their group and other groups in an effort to create a favorable between-group distinction and reach a positive sense of self (Tajfel, 1982). While this process often results in positive outcomes such as in-group identification and cooperation with in-group members, it may also result in negative outcomes for members of out-groups. This most often takes the form of stereotyping and discrimination (Van der Vegt, 2002).

The problem of in-group/out-group conflict may be intensified in rural communities. Fitchen (1990) points out that “in-migrants are not always effectively absorbed into the community as part of the social system and part of the conceptual ‘us’”. Even after many years of rural residence, in-migrants may continue to be labeled as “others” who embody negative out-group

characteristics. Fitchen (1990) further argues that the dichotomy of “native” and “newcomer” reinforces a “separateness and tension” that undercuts community solidarity.

Other researchers note the disconnection, and sometimes disinterest, that newcomers feel when they arrive in small towns (Jobs, 2000; Salamon, 2003). Misinformation or lack of knowledge about local culture and history, lack of family connections, segregated social networks, and spatial segregation (for example, living in new subdivisions) may inhibit a newcomer’s ties to the rural community. Interaction is crucial for upholding a sense of community, and all of these things may contribute to limited face-to-face interactions between newcomers and local community members (Bridger et al., 2002; Jobs, 2000; Salamon, 2003; Wilkinson, 1991), perhaps permanently altering social capital in the area (Krannich & Zollinger, 1997; Putnam, 2000; Putnam & Feldstein, 2003).<sup>1</sup> If in-migrants arrive in rural areas with suburban/urban expectations of privacy and independence, disinterest in community engagement will likely only contribute to the “other” view of local residents. Likewise, if in-migrants come to scenic rural areas with unrealistic expectations of life in that community, they are unlikely to stay, thus impeding the ongoing sense of community in the area—particularly when the influx of arriving and departing in-migrants is continuous (Jobs, 2000).

## 2. Potential sources of the culture clash

Part of the expectation for culture clash in rural communities is related to socio-demographic differences between native and in-migrant rural residents. Rural natives tend to be younger, less educated, and have lower household incomes than in-migrants (Green, Marcouiller, Deller, Erkkila, & Sumathi, 1996; Jobs, 2000). Because sociodemographic differences generally predict differences in socio-political attitudes and values, it follows that in-migrants would hold different views than natives.

In addition to socio-demographic explanations, common misunderstandings about the within-group homogeneity of natives and in-migrants in rural communities are often used to explain culture clash in rural communities. However, it may be inappropriate to assume that all rural natives share similar views.

Flora and Flora (2004) state, “In the past, small size and isolation combined to produce relatively homogenous rural cultures. . . and a strong sense of local identity. But globalization, connectivity, and lifestyle changes accompanying shifting income distributions have altered the character of rural communities. They are neither isolated nor as homogenous as they once were” (p. 4).

Existing research demonstrates that there are some similarities between rural natives and in-migrants (Jones et al., 2003; McBeth, 1995; Smith & Krannich, 2000; Talley, 2002), indicating that in-migrants may be drawn by the rural heritage or may increasingly value this heritage as they spend more time in the community. Given this last possibility, we would expect that for in-migrants who stay, time spent in the community should lessen the differences between them and the natives.

A final explanation of culture clash in rural communities is tied to misconceptions about the existence of a rural “cultural heritage” which may be threatened. As newcomers, rural in-migrants usually do not have a direct connection to the cultural heritage of the region, although

perceptions of regional culture may be part of what draws them to the area. Often times, though, in-migrants find that their perceptions of regional culture do not match the reality of their new surroundings. Disappointed, some will leave their new rural home (Bridger et al., 2002; Goudy, 1990; Flora & Flora, 2004; Jobes, 2000; Salamon, 2003). Still others will choose to actively support environmental, developmental, and other community changes in an effort to feel comfortable in their new surroundings. Natives may perceive these changes as threatening to the cultural heritage of the region.

With these explanations in mind, a better way to think about the effects of population growth may be to consider what in-migrants bring to rural community. If in-migrants are bringing similar attitudes and values, or if their views increasingly conform to native views as they spend more time in rural communities, a strong sense of community should remain even in the face of change. However, if in-migrants bring attitudes and values that stand in opposition to those held by rural natives, or are inadvertently promoting unwelcome changes in the community, it is unlikely that natives will accept them as members of the community group. Similarly, in-migrants in this circumstance will not identify with and become engaged members of the community. Both of these possibilities clearly support a culture clash thesis of community interaction.

### 3. Hypotheses

Based on the previous discussion, we expect to find the following in our study:

*Hypothesis 1:* Natives will view cultural heritage as more important than in-migrants.

*Hypothesis 2:* Compared to in-migrants, natives will view regional in-migration and development as more threatening to cultural heritage.

*Hypothesis 3:* The longer in-migrants have lived in rural areas, the more similar their views will be to native views.

*Hypothesis 4:* In-migrants who perceive in-migration and development as a threat to cultural heritage will hold similar views on regional social and political issues as natives who perceive in-migration and development as a threat to cultural heritage.

### 4. Data

Most of the previous work examining the culture clash thesis and in-migrant/native differences has focused on the American West—particularly the Rocky Mountain region (Graber, 1974; Shumway & Lethbridge, 1998; Smith & Krannich, 2000). Although valuable, the limited geographic areas examined in these studies raise some questions about external validity and generalizability. As a result, we draw data from a different rural region—the mountains of western North Carolina (WNC).

Although WNC has long been a tourist center (Starnes, 2005), and draws many amenity-seeking migrants, WNC is considered rural by the residents of the area and is formally labeled

a rural area by the [North Carolina Rural Economic Development Center \(2006\)](#), which characterizes 22 of the 23 counties represented in this study as rural.<sup>2</sup> The demographic characteristics of WNC resemble the demographics of most rural areas in the United States, making the region a good case study for understanding rural America. According to data from the 2000 Census, the region has a white population of 91.4% (compared to 88.9% in non-urban America), a 17.6% college graduation rate (compared to 16.4% in non-urban America), and a poverty rate of 12.3% (compared to 11.0% in non-urban America).

The survey data used in this study were collected by phone over a 2-week period in late 2003. The sample consisted of 2698 regional phone numbers that were selected using random digit dialing. Of these, 515 were ineligible because of a non-working or disconnected number, 522 were no answers, and 993 were refusals. Ultimately, 668 respondents were surveyed (response rate = 40%). In an age where the marketing literature suggests that response rates above 15% are acceptable ([Tomaskovic-Devey, Leiter, & Thompson, 1994](#)), our response rate is quite respectable and surpasses that of many recent general population surveys.

The characteristics of our sample resemble those in the population of citizens in WNC, although they do reflect some well-known biases of survey research. For instance, roughly 63% of the respondents in our survey were female, a common outcome with telephone surveys of the general public. Respondent age ranged from 18 to 85 years (mean = 48). More than half of the sample (56%) was married, 8% were widowed, 11% were divorced, 3% were separated, and 16% were never married. Educational attainment was slightly higher than that in the population; roughly 26% of the sample had a high school degree or equivalent, 28% had some college or trade school experience, 25% were college graduates, and 13% had a graduate degree. The overwhelming majority of the sample was white, making it impractical to test for racial differences.

## **5. Measures**

We employ four dependent variables in our analysis—opinions on regional heritage, support for new roads, support for zoning, and perceived unemployment in WNC. These dependent variables were included because they are recognized by residents as significant political and social issues that divide the western region of the state of North Carolina and are frequently cited in the literature as sources of conflict. Regional heritage, a somewhat ambiguous notion, is consistently emphasized in regional newspapers and other publications. Likewise, road and zoning issues are regularly represented in local elections and town meetings, and citizen groups have been organized with the intent of offering support or opposition to each issue. For example, a “Smart Roads, Not New Roads” movement is underway in one town where a bypass highway has been proposed to reduce traffic congestion at a major intersection. At this time, however, there is no existing evidence demonstrating that these issues are, indeed, a significant source of division among regional residents.

As stated above, one potential source of conflict between newcomers and natives concerns whether in-migrants place the same value on regional heritage. Many natives may feel that in-migrants want to change the community to resemble where they came from and may not appreciate the heritage of the natives. These tensions may be particularly high among “amenity

oriented migrants” (Smith & Krannich, 2000)—many of whom may be attracted to WNC. We measure *Importance of Regional Heritage* as a continuous variable using the following question: “On a scale of 1 to 100, where 1 equals ‘not important at all’ and 100 equals ‘very important,’ how important to you is regional heritage in western North Carolina?” Given the influence migration to rural areas has on land-use patterns (Vias & Carruthers, 2005), we use attitudes about zoning as a dependent variable. Other scholars have also found these issues to be important sources of conflict in communities in other regions (Cockerham & Blevins, 1977). *Support for Zoning* was measured as a dichotomous variable (0 = somewhat or strongly against, 1 = somewhat or strongly in favor) constructed from the following question: “How do you feel about zoning in the region? Are you strongly against, somewhat against, somewhat in favor, strongly in favor, or neither for or against zoning?”

While previous scholars have studied opinions on regional heritage and zoning, little extant work examines opinions on new roads. This is surprising as transportation issues are often at the center of cultural conflict—particularly in cases where some may wish to sacrifice private land in favor of widened or new roads. New roads may symbolize negative growth, may permanently alter the rural nature of an area and may even require government taking over private land. We measure *Support for New Roads* as a dichotomous variable (0 = no, 1 = yes) constructed from the following question: “Do you support building new roads in western North Carolina?”

Employment and personal economic situations lie at the center of many cultural conflicts—be they over race, class, or even the differences between migrants and natives. Many studies have examined how migration changes employment patterns in nonmetropolitan areas (Beyers & Nelson, 1999; Nelson, 1997, 1999). To explore into this dynamic, we include a dependent variable for *WNC Unemployment*, measured as a dichotomous variable (0 = decrease, 1 = stay the same or increase) constructed from the following question: “Do you think the number of working age adults who are currently unemployed in western North Carolina will decrease, stay the same, or increase over the next year?” Possible response categories included decrease, stay the same, and increase.

Independent variables of interest include proportion of life in WNC, perceived threat of in-migration, and perceived threat of development. Many scholars measure in-migrant status using a simple dichotomous variable separating respondents into two groups by the number of years they have lived in an area (Fortmann & Kusel, 1990; Smith & Krannich, 2000). We believe there are two potential limitations of this measure. First, this approach may mask variation across different times in the resident cycle—variation that may be better examined by using an ordinal measure. Second, the dominant approach to measuring newcomer/long-term residents, measures the number of years a person has lived in the region, but ignores the fact that that 10 years means something different to a 19-year old than to an 89-year old. As a result, we measure *Proportion of Life in WNC* using a series of dummy variables. Respondents were asked “About how many years have you lived in western North Carolina?” The respondent’s age in years was then divided by the number of years reported living in WNC. A respondent was considered a native if s/he had lived in WNC for his/her entire life ( $n = 234$ ) or moved to the area during early childhood (i.e., when s/he was 3 years old or younger,  $n = 38$ ) (total native  $n = 272$ ). The remaining respondents were considered in-migrants ( $n = 396$ ). In-migrants were broken into four groups based on the proportion of their life spent in WNC. In-migrants who lived in WNC up to 25% of their life were included in one group ( $n = 167$ ). Respondents who

lived in WNC 26–50% of their life were represented in another group ( $n = 114$ ). Respondents who lived in WNC 51–75% of their life were separated into a third group ( $n = 68$ ). Respondents who lived in WNC 76–99% of their life were placed in a fourth group ( $n = 47$ ). The native group ( $n = 272$ ) was used as the reference category in regression analyses.

Migration Threat<sup>3</sup> was measured as a continuous variable using the following question: “On a scale of 1 to 100, 1 being ‘not threatening’ and 100 being ‘very threatening’, how threatening do you feel in-migration is to the cultural heritage of western North Carolina? By in-migration, we mean people moving to western North Carolina from outside of the region.” *Development Threat* was measured as a continuous variable using the following question: “On a scale of 1 to 100, 1 being ‘not threatening’ and 100 being ‘very threatening’, how threatening do you feel development is to the cultural heritage of western North Carolina?” Development and in-migration have previously been identified as key factors in the culture clash.

We also collected data for a series of *Demographic Variables* including respondent gender, age, level of education, marital status, political ideology, employment status, and whether the respondent has children under the age of 18 years. *Gender* was measured as a dummy variable (0 = male, 1 = female). *Age* was measured as a continuous variable of the respondent’s current age in years. *Level of education* was measured as a categorical, ordinal variable (1 = eighth grade or less, 2 = some high school, 3 = high school graduate or GED, 4 = trade school, 5 = some college, 6 = college graduate, and 7 = graduate degree). *Marital status* was measured as a dummy variable (0 = married, 1 = unmarried). *Political ideology* was measured as a categorical, ordinal variable. Respondents were asked, “We hear a lot of talk these days about liberals and conservatives. On a scale of one to seven, where one equals extremely liberal and seven equals extremely conservative, where do you place yourself?” *Employment status* was measured as a dummy variable (0 = employed, 1 = unemployed). *Whether the respondent has children under the age of 18 years* was measured as a dummy variable (0 = does not have kids under 18, 1 = has kids under 18).

## 6. Results

We begin our analysis by examining descriptive statistics for each variable. In addition to basic descriptive statistics, Table 1 includes *t*-tests to determine whether each variable differs statistically by native status. The means for dichotomous variables in this table should be interpreted as proportions. In all, Table 1 suggests that in-migrants to western North Carolina tend to be older, more educated, and hold less conservative political ideologies than natives. Compared to in-migrants, more natives are employed and have children under the age of 18. Natives view regional heritage as more important and are more threatened by in-migration and development in the region than are in-migrants. In-migrants are more likely to support zoning but less likely to support new roads in the region. These findings lend some support to our first two hypotheses and to findings from previous research on the demographic differences between natives and in-migrants in rural areas (Graber, 1974; Jobes, 2000). There are no statistically significant group differences for gender, marital status, or perceptions of unemployment in the region.

Table 1  
Descriptive statistics by native status ( $N = 668$ )

	<i>N</i>	Mean	S.D.	Range	<i>t</i> -Statistic
Gender					
Native	272	.599	.491	0–1	1.307
In-migrant	396	.649	.478	0–1	$p < .192$
Age					
Native	272	44.449	16.419	18–85	4.176
In-migrant	396	49.942	16.900	18–85	$p < .000$
Education					
Native	272	4.118	1.506	1–7	4.176
In-migrant	396	5.028	1.535	1–7	$p < .000$
Married					
Native	272	.636	.482	0–1	.586
In-migrant	396	.614	.488	0–1	$p < .558$
Political ideology					
Native	272	4.746	1.567	1–7	–3.074
In-migrant	396	4.341	1.745	1–7	$p < .002$
Employed					
Native	272	.640	.481	0–1	–3.146
In-migrant	396	.518	.500	0–1	$p < .002$
Children <18					
Native	272	.390	.489	0–1	–2.982
In-migrant	396	.280	.450	0–1	$p < .003$
Years in WNC					
Native	272	44.125	16.442	18–85	–20.413
In-migrant	396	18.348	15.750	0–78	$p < .000$
In-migration threat					
Native	272	64.740	32.064	1–100	–5.921
In-migrant	396	48.810	35.524	1–100	$p < .000$
Development threat					
Native	272	58.810	28.538	1–100	–2.958
In-migrant	396	51.880	30.532	1–100	$p < .003$
Importance of heritage					
Native	272	75.560	23.551	1–100	–4.408
In-migrant	396	66.270	28.729	1–100	$p < .000$
Supports new roads					
Native	272	.842	.366	0–1	–3.437
In-migrant	396	.730	.445	0–1	$p < .001$
Unemployment rate					
Native	272	.743	.438	0–1	–.796
In-migrant	396	.715	.452	0–1	$p < .426$
Supports zoning					
Native	193	.435	.497	0–1	4.617
In-migrant	307	.642	.480	0–1	$p < .000$



Table 2  
Cross-tabulations of cultural heritage and perception of threat by native status ( $N = 668$ )

Importance of cultural heritage	In-migrant	Native	Total
Score = 0–60, column %	160, 40.4%	73, 26.8%	233, 34.9%
Score = 61–88, column %	122, 30.8%	97, 35.7%	219, 32.8%
Score = 89–100, column %	114, 28.8%	102, 37.5%	216, 32.3%
Total, column %	396, 100%	272, 100%	668, 100%
Threat of in-migration	In-migrant	Native	Total
Score = 0–46, column %	157, 39.6%	60, 22.1%	217, 32.5%
Score = 47–74, column %	139, 35.1%	96, 35.3%	235, 35.2%
Score = 75–100, column %	100, 25.3%	116, 42.6%	216, 32.3%
Total, column %	396, 100%	272, 100%	668, 100%
Threat of development	In-migrant	Native	Total
Score = 0–45, column %	126, 31.8%	64, 23.5%	190, 28.4%
Score = 46–73, column %	149, 37.6%	108, 39.7%	257, 38.5%
Score = 74–100, column %	121, 30.6%	100, 36.8%	221, 33.1%
Total, column %	396, 100%	272, 100%	668, 100%

Pearson- $\chi^2 = 13.451$ , d.f. = 2,  $p < .001$ . Pearson- $\chi^2 = 30.444$ , d.f. = 2,  $p < .000$ . Pearson- $\chi^2 = 5.955$ , d.f. = 2,  $p < .051$ .

To assure that statistically and substantively significant differences exist between natives and in-migrants, we ran a series of cross-tabulations. Table 2 reports results from crosstabs of perceived importance of cultural heritage and perceived threat of in-migration and development to the cultural heritage of the region by native status. Using the combined sample of natives and in-migrants, the cultural heritage and threat variables were divided into three approximately equal sets of respondents for analyses. Findings indicate that significant statistical and substantive differences exist between native and in-migrant perceptions for each issue, lending further support to the first and second hypotheses. While roughly the same percentage of natives and in-migrants find cultural heritage to be moderately important (as indicated by a score of 61–88), more in-migrants perceive it as relatively unimportant (as indicated by a score of 60 or below) while more natives find it to be very important (as indicated by a score of 89 or more).

We find similar results for perceived threat of in-migration and development. For in-migration, a larger percentage of natives are threatened by in-migration, as demonstrated by a score of 75 or higher. A larger percentage of in-migrants are relatively unthreatened, as indicated by a score of 46 or less out of a possible 100. For development, a larger percentage of in-migrants view development as having a low threat level compared to natives, as demonstrated by a score of 45 or lower.

Table 3 reports results from crosstab analyses of perceived importance of cultural heritage and perceived threat of in-migration and development to the cultural heritage of the region by time spent in the region. To test this, the native group was unchanged and the in-migrant group was split according to the proportion of their life they reported to have spent in the region: 0–25%, 26–50%, 51–75%, and 76–99%, respectively. Cultural heritage and threat variables were divided into the same three approximately equal sets of respondents as discussed above.

Table 3

Cross-tabulations of cultural heritage and perception of threat by time in region ( $N = 668$ )

Importance of cultural heritage	0–25%	26–50%	51–75%	76–99%	Native	Total
Score = 0–60, column %	74, 42.5%	45, 40.5%	28, 40.6%	13, 31.0%	73, 26.8%	233, 34.9%
Score = 61–88, row % column %	58, 33.3%	32, 28.8%	16, 23.2%	16, 38.1%	97, 35.7%	219, 32.8%
Score = 89–100, column %	42, 24.1%	34, 30.6%	25, 36.2%	13, 31.0%	102, 37.5%	216, 32.3%
Total, column %	174, 100%	111, 100%	69, 100%	42, 100%	272, 100%	668, 100%
Threat of in-migration	0–25%	26–50%	51–75%	76–99%	Native	Total
Score = 0–46, column %	83, 47.7%	40, 36.0%	21, 30.4%	13, 31.0%	60, 22.1%	217, 32.5%
Score = 47–74, column %	57, 32.8%	43, 38.7%	30, 43.5%	9, 21.4%	96, 35.3%	235, 35.2%
Score = 75–100, column %	34, 19.5%	28, 25.2%	18, 26.1%	20, 47.6%	116, 42.6%	216, 32.3%
Total, column %	174, 100%	111, 100%	69, 100%	42, 100%	272, 100%	668, 100%
Threat of development	0–25%	26–50%	51–75%	76–99%	Native	Total
Score = 0–45, column %	53, 30.5%	33, 29.7%	26, 37.7%	14, 33.3%	64, 23.5	190, 28.4%
Score = 46–73, column %	71, 40.8%	39, 35.1%	26, 37.7%	13, 31.0%	108, 39.7%	257, 38.5%
Score = 74–100, column %	50, 28.7%	39, 35.1%	17, 24.6%	15, 35.7%	100, 36.8%	221, 33.1%
Total, column %	174, 100%	111, 100%	69, 100%	42, 100%	272, 100%	668, 100%

Gamma = .181, S.E. = .046,  $T = 3.931$ ,  $p < .000$ . Gamma = .308, S.E. = .044,  $T = 6.770$ ,  $p < .000$ . Gamma = .095, S.E. = .047,  $T = 2.028$ ,  $p < .043$ .

The results indicate that there are significant statistical and substantive differences between native and in-migrant perceptions for each issue with respect to the amount of time in-migrants have spent in the region, lending support to the third hypothesis.

Comparing the importance of cultural heritage, column percentages indicate that the importance of cultural heritage score increases for in-migrants as they spend more time in the region. However, the importance of cultural heritage score for natives still tends to be higher than in-migrants who have spent more of their life in the region.

For perceived threat of in-migration, a clear pattern emerges in the column percentages. In-migrants who have spent the lowest proportion of their lives in the region are the least threatened by in-migration (as indicated by a score of 46 or lower), whereas natives and in-migrants who have spent the highest proportion of their lives in the region are the most threatened by in-migration (as indicated by a score of 75 or higher). In-migrants in the middle of the proportion of life spent in the region are moderately threatened by in-migration (as indicated by a score of 47–74) compared to other in-migrant groups and natives.

The distribution of scores for perceived threat of development is less clear. In-migrants who have spent 51–75% of their life in the region are the least threatened by development (as indicated by a score of 45 or less), while natives and in-migrants who have spent 76–99% and 26–50% of their lives in the region are more threatened by development (as indicated by a score of 74 or higher).

To control for socio-demographic variables that may influence the relationship between native status, importance of cultural heritage, and perceived threat, as well as test the fourth hypothesis, we estimated a series of multivariate regression models. Each model includes independent variables representing the proportion of time the respondent has spent in WNC,

Table 4  
Threat to regional heritage regressed on demographics and native status ( $N = 668$ )

	In-migration	Development
Female	-1.267 (2.779)	2.453 (2.451)
Age	-.025 (.088)	-.080 (.078)
Education	-1.803* (.887)	.465 (.783)
Unmarried	3.950 (2.784)	4.095 <sup>+</sup> (2.455)
Conservative	2.510** (.805)	.646 (.710)
Unemployed	-1.270 (2.882)	-4.620 <sup>+</sup> (2.542)
Has kids <18	1.818 (3.057)	-.807 (2.697)
Life in WNC (ref category = native)		
0–25%	-17.042*** (3.513)	-6.083* (3.099)
26–50%	-9.955** (3.915)	-4.648 (3.453)
51–75%	-8.702 <sup>+</sup> (4.650)	-9.286* (4.102)
76–99%	.293 (5.820)	-3.823 (5.133)
Constant	59.742*** (7.473)	56.083*** (6.591)
Adjusted, $R^2$	.073	.011

<sup>+</sup> $p < .10$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ ; one-tailed tests. *Note*: unstandardized coefficients are presented (standard errors).

along with control variables for respondent gender, age, level of education, marital status, political ideology, employment status, and whether the respondent has children under the age of 18 years.

Table 4 reports<sup>4</sup> results from OLS regressions of perceived threat to regional heritage on native status and demographic variables of interest. Model 1 shows results for perceived threat of in-migration on regional heritage. As level of education increases, perceived threat of in-migration decreases. Ideological conservatives are more likely to feel threatened by in-migration than those who claim to hold a moderate or liberal political ideology. Compared to natives, in-migrants who have spent a smaller proportion of their life in WNC are significantly less likely to view in-migration as a threat to regional heritage. As proportion of life spent in WNC increases, the difference between in-migrants and natives becomes smaller and less significant with regard to perceived threat of in-migration. We found no difference between natives and in-migrants who have spent over three quarters of their life in WNC, lending support to the second and third hypotheses.

Model 2 shows results for perceived threat of development on regional heritage. Compared to natives, in-migrants who have spent one quarter or less of their life in WNC are significantly less likely to feel that development threatened regional heritage. However, the in-migrants who have spent between half and three quarters of their life in the region are also less likely than natives to feel that development threatened regional heritage. Again, there appears to be no difference for natives and in-migrants who have spent over three quarters of their life in the region, lending support to the second and third hypotheses.

The first two models in Table 5 report results from OLS regression of perceived importance of regional heritage on demographic variables of interest, proportion of life in the region, and perceived threat of in-migration and development. Women view regional heritage as more important than men. In-migrants who have spent a smaller proportion of their life in the region

Table 5

Importance of regional heritage and support for new roads regressed on demographics, native status, and heritage threat ( $N = 668$ )

	Regional heritage model 1	Regional heritage model 2	New roads model 3	New roads model 4
Female	4.285* (2.201)	3.870+ (2.149)	1.185 (.199)	1.228 (.201)
Age	-.106 (.070)	-.091 (.068)	1.007 (.009)	1.007 (.006)
Education	.082 (.703)	.057 (.689)	.907 (.065)	.909 (.066)
Unmarried	-1.803 (2.205)	-2.702 (2.155)	1.075 (.203)	1.127 (.205)
Conservative ideology	.849 (.638)	.643 (.626)	1.038 (.057)	1.042 (.059)
Unemployed	-1.183 (2.284)	-.278 (2.231)	.878 (.207)	.835 (.209)
Has kids <18	.178 (2.422)	.267 (2.362)	1.065 (.222)	1.053 (.223)
Life in WNC (ref category = native)				
0–25%	-10.493*** (2.783)	-8.777** (2.761)	.636+ (.257)	.608+ (.264)
26–50%	-6.508* (3.101)	-5.301+ (3.038)	.542* (.278)	.523* (.282)
51–75%	-7.978* (3.684)	-5.949 (3.607)	.691 (.342)	.628 (.347)
76–99%	-1.719 (4.610)	-1.016 (4.496)	.295*** (.372)	.279** (.377)
Perceived threat				
In-migration		.034 (.034)		1.001 (.003)
Development		.187*** (.038)		.989** (.004)
Constant	74.044*** (5.920)	61.544*** (6.171)	4.294** (.539)	7.819*** (.589)
Adjusted/Nagelkerke, $R^2$	.029	.078	.046	.069
$\chi^2$			2.308	30.942**

Note: models 1 and 2 are OLS regression models with unstandardized coefficients (standard errors). Models 3 and 4 are logistic regression models with odds ratios (standard errors). + $p < .10$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ ; one-tailed tests.

see regional heritage as less important than natives. In-migrants who have lived in WNC a larger proportion of their lives share similar views as natives on the importance of regional heritage, thus supporting the first and third hypotheses. This effect is somewhat mediated by perceived threat of development (see model 2), such that a small part of the initial effect of proportion of life spent in WNC can be explained by perceived threat of development. The effect of time in the region decreases somewhat as perceived threat of development increases, lending support to the fourth hypothesis.

The third and fourth models in Table 5 report results from logistic regression predicting support for new roads on demographic variables of interest, proportion of life in WNC, and perceived threat of in-migration and development. Compared to natives, in-migrants who have spent most of their life in the region have lower odds of supporting new roads in WNC. Those who have spent less of their lives in the area have more similar views about new roads with natives, lending support to the third hypothesis. People who perceive an increased threat of development have lower odds of supporting new roads (see model 4), although this did not decrease the effect of time spent in the region, lending some support for the fourth hypothesis.

The first two models in Table 6 report results from logistic regression of perceptions of the regional unemployment rate on demographic variables of interest, proportion of life spent in the region, and perceived threat to the region. The odds of seeing an unchanging or increasing regional unemployment rate are higher for women and persons with more education. Compared

Table 6

Unemployment rate (same or increased) over next year ( $N = 668$ ) and support for zoning, ( $N = 500$ ) regressed on demographics, native status, and heritage threat

	Unemployment model 1	Unemployment model 2	Zoning model 3	Zoning model 4
Female	1.451* (.187)	1.455* (.187)	1.234 (.202)	1.221 (.205)
Age	1.001 (.006)	1.000 (.006)	1.021** (.007)	1.022** (.007)
Education	1.298** (.061)	1.301*** (.061)	1.284*** (.065)	1.269*** (.066)
Unmarried	.911 (.188)	.912 (.189)	.897 (.209)	.955 (.212)
Conservative ideology	.963 (.055)	.962 (.055)	.952 (.058)	.970 (.059)
Unemployed	.872 (.194)	.869 (.194)	1.150 (.214)	1.131 (.216)
Has kids <18	1.030 (.209)	1.028 (.209)	.958 (.228)	.959 (.231)
Life in WNC (ref category = native)				
0–25%	.626* (.239)	.628+ (.243)	2.218** (.260)	1.902* (.267)
26–50%	.860 (.273)	.859 (.274)	1.543 (.281)	1.360 (.287)
51–75%	.747 (.315)	.744 (.316)	1.228 (.329)	1.177 (.333)
76–99%	.600 (.376)	.597 (.377)	.622 (.415)	.570 (.421)
Perceived threat				
In-migration		1.001 (.003)		.992** (.003)
Development		.999 (.003)		.997 (.004)
Constant	1.010 (.498)	1.029 (.533)	.118*** (.563)	.222** (.597)
Nagelkerke $R^2$	.061	.062	.158	.184
$\chi^2$	28.966**	29.055**	62.722***	73.869***

Note: odds ratios (standard errors). + $p < .10$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ ; one-tailed tests.

to natives, the odds of expecting a decreasing regional unemployment rate are higher for in-migrants who had spent a smaller proportion of their lives in WNC, lending some support to the third hypothesis. Perceived threat of in-migration or development does not directly influence perceptions of the regional unemployment rate.

The third and fourth models in Table 6 report results from logistic regressions predicting support for zoning on demographic variables of interest, proportion of time spent in the region, and perceived regional threat. The odds of support for zoning are higher for older persons and persons with more education. Compared to natives, the odds of supporting zoning are higher for in-migrants who have spent less of their life in WNC, although this effect does not hold for groups of in-migrants who have spent a larger proportion of their life in the region, lending support for the third hypothesis. This effect is mediated by perceived threat of in-migration (see model 4), indicating that in-migrants who view in-migration as threatening to regional heritage have lower odds of supporting zoning, lending support to the fourth hypothesis.

## 7. Discussion

Similar to people in other rural regions, many who live in WNC believe there is a division between natives and those migrating into the region. Results from this study suggest that there are, indeed, some differences between the demographic makeup of native and non-native

groups. As found in previous research (Jobses, 2000), in-migrants in our sample were older, less conservative, more educated, less likely to be employed, and less likely to have children under the age of 18 than the native group members.

Our survey data also reveal important attitudinal differences between natives and in-migrants. Contrary to our expectations, demographic differences between the groups were not largely responsible for attitudinal differences. The defining characteristics between in-migrants who value the heritage of the region and those who do not is the proportion of their life spent in the region and associated sense of threat to cultural heritage; the longer amount of their lives in-migrants spend in WNC, the more their perceptions of threat related to in-migration and development resemble that of natives. Proportion of life in the region and threat to cultural heritage also play an important role in understanding group differences in social and political issues in the region. Attitude consistency found within and between groups suggests that a cultural divide does exist, but it is different than conventional wisdom would have us believe. This provides further support for Smith and Krannich (2000) who find the culture clash thesis is not as clear-cut as many believe.

These findings also offer some indirect evidence that rural cultural heritage is alive and well in western North Carolina. While the distinction between natives and in-migrants is salient, the similarity between natives and in-migrants who have spent a larger proportion of their lives in the region may be more notable for understanding the importance of cultural heritage in amenity-based community research. As expected, in-group members (i.e., natives) demonstrate attitudinal resistance to out-group members (i.e., in-migrants) in the form of perceived threat. However, if in-migration occurs through a process of selection, it is likely that some of the people choosing to migrate to the region come because they have the same attitudes and perceptions about the culture of the rural mountains as those who are native to the region. The longer these in-migrants spend in the region, the more they tie themselves to the community through their interactions and relationships. They likely begin to view themselves as in-group members over time, embedding their sense of self in the community, which understandably would lead to a heightened sense of threat related to in-migration and development. Compared to repeat migrants, in-migrants who hold accurate conceptions of living in this type of community are more satisfied with the community, ultimately leading them to stay for long periods of time, if not the duration of their lives. Previous research demonstrates that sense of community and community satisfaction is an important predictor of well-being, net of social and demographic factors such as education and income (Jobses, 2000; Putnam, 2000; Putnam & Feldstein, 2003; Theodori, 2001). So a healthy sense of community is in the best interests of in-migrants and natives alike.

While the findings from this study provide some evidence about group similarity in social perceptions in rural communities, we were not able to assess the direct effect on community. Future research focusing on the representation of community for natives and in-migrant populations would benefit our understanding of the effects of in-migration on rural communities, and would clarify the meaning of community in the larger literature. Existing definitions of community remain somewhat ambiguous, making it difficult to understand the effects of ongoing change in rural regions (Connell, 2004; Wilkinson, 1991). Community research that incorporates direct measures of social identity would also benefit our understanding of the role of group processes and threat on attitudes and perceptions of rural community

members. Future research should also seek out national samples to answer many of these questions. We now have evidence from the Rocky Mountain West and from western North Carolina, but if these findings are generalizable, we should find similar patterns in other regions as well.

Clearly, conventional beliefs about the differences between natives and in-migrants are counterproductive. Migration and development seem to be inevitable. If rural areas are to continue prospering, we must begin a regional dialogue about growth, development, and heritage. Indeed, developing feelings of community and sense of place is key for nonmetropolitan vitality (Rudzitis, 1991). If in-migrants come to rural regions with an accurate or, at least open, conception of what it means to live in a rural region, they should demonstrate more of a willingness to get involved in the region. If natives also show a willingness to open their region to these types of newcomers, the overall community solidarity in the region should be strengthened, not put at risk.

As indicated by the results of our research, issues surrounding the changing nature of rural community are not as simple as they are often portrayed. Globalization and in-migration certainly affect the structure of rural communities, but its interactive nature lends an adaptable quality that keeps community going strong in spite of change. In the case of our study, regional natives and in-migrants alike indirectly indicate attachment to the community, as represented by perceived sense of threat *and* the fact that longer-term residents hold views similar to those held by natives. In spite of the inevitable change that is occurring, the evidence continues to indicate a vibrancy in rural communities that speaks to its overall persistence (Krannich & Luloff, 2002).

## Notes

1. Freudenburg (1984) finds that young people are affected by population change more than older people and that young people in communities with rapid population change exhibit feelings of alienation and lower feelings of satisfaction than younger people in communities facing less change.
2. County of residence was the only residential information gathered from the respondents. More specific information regarding residential population density for respondents is not available.
3. We ran normality tests for variables with responses ranging from 0 to 100 (i.e., migration threat, development threat, and importance of regional heritage). Test results indicate that skewness and kurtosis for each variable did not exceed .8. Although there was a slight tendency for response clustering at the mid-point and ends of the range, the distributions of these variables were relatively continuous.
4. All regression models are significant using the *F*-test. We do not interpret the low  $R^2$  in Tables 4–6 as problematic. As King (1986) suggests, “The purpose of regression analysis is to estimate interesting population parameters (regression coefficients in this case). The best regression model usually has an  $R^2$  that is lower than could be obtained otherwise. [Furthermore,] it is a measure of the proportion of variance explained, and, although this interpretation is commonly used, it is not clear how this interpretation adds meaning to

[social] analyses.” (p. 677–678). We consider the size of the regression coefficients and standard errors to be better indicators of the accuracy with which to make inferences regarding the variables in the models.

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