

WHO ARE YOUR PEOPLE?: INVESTIGATING COLLECTIVISM IN APPALACHIA

by

JODI TREADWAY

(Under the Direction of Victoria C. Plaut)

ABSTRACT

Appalachia is home to more than 25 million people (ARCa, 2012), yet it is rarely featured in psychological research. The region also has a reputation as being individualistic, even compared to the individualistic United States in which it exists. However, Appalachia also has several cultural markers associated with collectivism. The present studies seek to address this seeming paradox through the use of multiple methodologies, including qualitative analysis and a variety of quantitative measures. Study 1 examined viewbooks from universities both inside and outside Appalachia for individualistic and collectivistic markers. Study 2 used surveys containing two traditional individualism/collectivism scales and three individual difference and behavioral measures to test the same question quantitatively. Results suggest that Appalachia displays several characteristics that would mark it as more individualistic than the U.S. mainstream, but also evidence of a collectivistic subculture.

INDEX WORDS: Appalachia, individualism, collectivism, cultural psychology

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DEDICATION

To my parents, David and Lawanna Treadway, who encouraged me to let my mind run free; my sister, Jennifer Fleenor, my earliest partner in crime; and to Jonathan Midkiff, whose endless patience and limitless support through this long process has never ceased to amaze and humble me. I love you all, and I thank you for always letting me be me.

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CHAPTER 1

INTRODUCTION

How many regions does the U.S. contain? The most basic division seems to be the “big four”: the Northeast, the South, the Midwest, and the West. These four are seen and discussed everywhere from climate research to regional television broadcasts. If pressed, subdivisions may be created: the West will be divided into the Rocky Mountains, the West Coast, and the Southwest. The Great Lakes and the Great Plains may separate, and some may distinguish between New England and the Mid-Atlantic. The Appalachian region, however, rarely seems to spring to mind, despite being within a few hours’ drive of several major Northeastern, Midwestern and Southern cities, and being home to more than 25 million people (ARCa, 2012). If it is the topic of discussion, the region is usually associated with either ecological contexts (as in its scenery and natural resources), or economic ones (as in the region’s habitual poverty). There is one context, however, in which Appalachia almost never appears, and that is experimental psychological academic research.

Since the late 19th century, when writings on the region first appeared, most of the journalism and formal research directed to the Appalachian region has been concentrated on issues related to education, health care, poverty reduction, or on tracing the historical origins of the region’s cultural products, such as folk ballads and handicrafts. While these research efforts are invaluable and enlightening, such focus on only well-being outcomes or a few aspects of the culture leave large gaps in our understanding of the area. In addition, little if any research has been conducted with the input of academically-trained native researchers, since only in recent years have college and post-baccalaureate graduation rates for the region begun to even approach

the levels seen elsewhere in the country. This outsider perspective can lend itself to biases in both approach and topic selection, even among the most careful and self-aware researchers. The present research, conducted by a native of the region, contains introductory investigations into a basic aspect of the region's cultural psychology; namely, whether the region tends towards individualism or collectivism. The individualism/collectivism (I/C) construct is a fundamental one in cultural psychology, and thus this research represents a first step in building a better understanding of the unique psychology of this oft-overlooked region. Many charitable and governmental agencies, with only good intentions, try to implement policies without taking into account the unique historical, cultural, and psychological nature of the region's residents. The hope is that with greater understanding of this psychology, we will begin to find solutions for Appalachia's problems through means that will assure the population's agency in their own future. I will begin my discussion with a brief overview of the region.

Appalachia

Appalachia can be defined both geographically and culturally. The Appalachian Mountains themselves stretch from Newfoundland to central Alabama. The federal Appalachian Regional Commission (ARC), which works with Appalachian counties on economic development issues, defines Appalachia as a 420 county (including eight independent cities in Virginia) region stretching from New York to Alabama and Mississippi (Appalachian Regional Commission, 2009). However, this definition was based solely on government funding allocations, and poorer counties on the borders of the mountains requested inclusion in order to receive those benefits. Thus, some counties were included in the ARC definition that have little culturally in common with the rest of the region (those in Mississippi, for example). By most definitions, cultural Appalachia is usually restricted to the Central Appalachian sub-region,

consisting roughly of eastern Kentucky and Tennessee, western Virginia and North Carolina, and the entire state of West Virginia (See Figure 1 for a map of the entire region and its sub-regions). This is the highest and most rugged part of the mountain chain, and so has historically remained the most isolated (ARCa, 2012). Other less isolated parts of the chain have had various cultural influences acting on them. Northern Appalachia (southern Pennsylvania, eastern Ohio, and far western Maryland) is near several major industrial cities, and so has an economic profile which the other areas lack. Southern Appalachia (Northern Georgia and extreme northwestern South Carolina) has only a few counties in the mountains proper (although the ARC boundaries extend into Atlanta's suburbs). Its Appalachian population is small, and its culture has historically been more aligned with that of the Deep South. In general, the economic, ethnic, and education profiles of these areas differ from that of Central Appalachia (ARCa, 2012). In the present study, only natives of Central Appalachia as defined above will be considered "Appalachian" for analysis purposes.

Residents of the Central Appalachian region share certain cultural similarities with each other that are distinct from other regions of the United States. The most infamous and widely studied is the region's persistent economic distress. By 2011, the recession of the late 2000s sent employment rates in the U.S. back to 2004 levels. During that same period, the Appalachian region lost *all* its employment gains since 2000 (ARCd, 2012). While the entire Appalachian region has made some strides in decreasing the poverty rate (the region's 2008-2012 poverty rate of 16.6% is comparatively close to the 14.9% of the entire U.S.), much of Central Appalachia has fared worse than the Northern and Southern areas (ARCa, 2012). West Virginia's 2008-2012 poverty rate was 17.6%, Appalachian Tennessee's was 17.8%, Appalachian North Carolina's was 17.9%, and Appalachian Virginia's was 18.6% (ARCa, 2012). Appalachian

Kentucky fares the worst, with a poverty rate of 25.1%, which is over 160% of the national rate (ARCa, 2012).

Central Appalachia is not only poorer than average, but also more rural. Forty-two percent of Appalachians live in a designated rural area, as compared to 20 percent of the national US population (ARCa, 2012). Education levels are likewise lower than the national average. In Appalachian Kentucky, for example, high school completion rates are 73.7%, while college completion rates are only 12.8% (ARCb, 2012). Compare this to the U.S. as a whole, where high school completion rates are 85.7% and college completion rates are 28.5% (ARCb, 2012).

As you can see, the Appalachian region has several features which mark it as a region apart, not only from the other U. S. regions surrounding it, but even divided within itself. Several of these features are associated with differences in levels of individualism and collectivism. Differences in this construct carry a wide range of implications for behaviors, attitudes, conceptual thinking, perception, well-being and health outcomes, among other domains. In the next section, I will discuss those features of Appalachian culture that could potentially have consequences for its levels of individualism and collectivism.

Individualism and Collectivism in Appalachia

Traditionally, cultural psychologists have divided the world's cultures into individualistic and collectivistic (Hofstede, 1980; Triandis, 1988; Markus & Kitayama, 1991). Individualistic cultures have practices and traditions that lead individuals to prioritize their uniqueness and personal goals, rather than conforming to the group or prioritizing group interests. Conversely, collectivistic cultures encourage group harmony, strong relationships, and the priority of collective goals over individual ones (Markus & Kitayama, 1991). Much of the research on the topic to date has focused on cross-national differences between cultures (Triandis, 2005).

However, a small but growing body of recent research suggests that self-concept and other cultural meaning concepts vary within countries as well as between them (e.g., Vandello & Cohen, 1999; Plaut, Markus & Lachman, 2002; Plaut, Markus, Treadway & Fu, 2012). For instance, the U.S. is routinely identified as the most individualistic country in the world (Kim, 1994). However, some states and regions within the U.S. seem to be more collectivistic than the country as a whole, including Hawaii, Utah, and the South as a whole (Vandello & Cohen, 1999; Fu, Plaut, Treadway & Markus, 2013). This is not to say that these regions and states are collectivistic to the degree of famously collectivistic societies such as Japan or China, but that residents of these areas are more likely to possess certain collectivistic traits and behaviors than U.S. natives who grew up or reside in other parts of the U.S. Like those regions, I believe that Appalachia contains a more complex individualistic/collectivistic profile, despite a history of being viewed as strictly individualistic.

Journalists, entertainment media, and some scholars have all based their individualistic depictions of Appalachia on a few specific cultural traits (Campbell, 1921; Drake, 2001). For example, much has been written on the perceived self-reliance of the Appalachian natives, and of their dislike and distrust of outsiders. These ideas, combined with the relative isolation of the region, have seemed to imply an individualistic culture (deMarrais, 1998). One of Jones' (1975/1987) informants stated:

“We [Appalachian people] are inclined to try to do everything ourselves, find our own way when we are lost on the road, or suffer through when we are in great need. We don't like to ask others for help. The value of self-reliance is often stronger than the desire to get help.” (p. 510)

However, Ford's 1962 attitudes study found that Appalachians' positive views on welfare and the practicality of collective actions would indicate a more collectivistic orientation (Ford, 1962). In fact, Ford was surprised at how little the Appalachian people resembled the rugged and self-reliant stereotype he had expected (1962). Consider, too, that research has correlated higher individualism with affluence and financial stability, and collectivism with poverty (Vandello & Cohen, 1999; Singelis et al, 1995; Triandis, 1995). Appalachia's persistent poverty would suggest a tendency towards a more collectivistic orientation within a mainstream American individualism.

In addition to the collectivism associated with poverty, rurality, and lower education levels, Appalachian natives have historically placed high value on certain collectivistic principles. The most famous is perhaps the strong emphasis on family, seen through strong kinship ties (Batteau, 1982; Bryant, 1981; Matthews, 1966), as well as a deep sense of family history (Keefe, 1998). Part of the Appalachian social identity is using one's family as an identifier ("I'm Laura, Doctor Taulbee's girl", or, "She married a Napier man"). Appalachian natives have also been shown to have strong community connections. In the region, communities are seen as a component of one's social identity (Beaver, 1986; Halperin, 1998). Appalachian natives can be extremely specific in identifying where they live or grew up, even to the point of using individual creek valleys or ridges where family members tend to cluster. Appalachians have been shown to be suspicious of change, even when they themselves initiate it, another hallmark of collectivistic cultures (Shinn, 1999). Appalachian natives (ironically, given the long association with feuding) have also demonstrated desires to avoid conflicts at any costs (Beaver, 1986; Keefe, 1998). Indeed, one could make the argument that self-reliance, long associated with individualism, could be related to the collectivistic trait of conflict avoidance.

Research has shown that among some collectivistic cultures, help-seeking is discouraged, due to a fear of “putting people out”, or potentially upsetting social harmony by asking others to sacrifice time or resources on your behalf (Taylor et al, 2004; Kim et al, 2006). Adding family to this dynamic complicates the situation further. For example, battered women in Appalachia rarely report their abuse even to friends and family, not only out of shame, but in order to avoid revealing family secrets (Feine, 1991). In fact, the only common way to solicit assistance from others in the region is to invite them to pray for the person in need (Keefe & Curtin, 2012). This solicitation may be done among a church congregation, or more recently, through Facebook or other social media. This spiritual assistance is usually considered sufficient by the highly religious Appalachian residents (Keefe & Curtin, 2012). Even speech patterns seek to be non-confrontational. Orders, direct suggestions, and pointed questions are usually avoided. Instead, these are phrased indirectly, so that the respondent may choose to answer in as much detail as he or she desires, or give no answer at all (Russ, 2010). For example, a non-Appalachian native might directly ask, “Are you doing anything this weekend?” An Appalachian native interested in the same question would likely say, “I’m not doing much this weekend.” This is an invitation for the other person to either elaborate on their plans or say nothing about them without feeling forced either way.

Appalachians have also been noted for their sense of place, another feature of collectivist societies. Most Appalachian natives are deeply loyal and tied to their hometowns and the region itself. Appalachian writer Loyal Jones once joked that Appalachians who had died and gone to Heaven had to be chained there or they would try to go back home every weekend (1987). Appalachians tend to make all efforts to remain close to their hometowns after reaching adulthood (Chenowith & Gallaher, 2004). College freshmen choose schools within a short drive

of home, and choose careers from among the few with somewhat reliable employment in the area, such as teaching and nursing (Chenowith & Gallaher, 2004). Those that choose to work or go to school far from home are subject to increased internal conflict and negative remarks from others (Hand & Payne, 2008).

In recent years, some research has been done to examine the impacts of Appalachian cultural collectivism markers on psychological outcomes. As usual, much of this research has focused on health care outcomes and coping behaviors (see Ludke & Obermeyer, 2012 and Keefe, 2005 for book-length treatments of the topic). In the educational domain, Gore, Wilburn, Treadway & Plaut (2010) found that Appalachian natives who embrace collectivistic attitudes tend to do better in school than collectivistic non-Appalachian students, and that Appalachian students perform better when they feel connected with their schools. However, of this research, only the Gore et al article deals with I/C as a psychological construct explicitly. The health-focused research deals with some aspects of collectivism (such as reluctance to seek help), but does not do so within the standard general psychological framework. The present studies were designed as a first step to addressing this lack of research in an explicitly cultural psychological framework. As part of that framework, the present study will utilize a variety of methods to test the hypothesis that Appalachians are more collectivistic than the mainstream U.S. population. In the next section, I discuss the importance of the multiple method approach in cultural psychological research, and its implementation in the present study.

Multiple Methods in Cultural Psychology

As this research seeks to answer a need for more cultural psychological research into Appalachia, part of that goal involves being as thorough as possible. Although I cannot hope to address every possible topic, I wanted to use as many methods as was feasible. I took this

approach for several reasons. As stated above, the lack of non-applied research on the area means that we do not know what topics and techniques will be applicable and useful. With the present study, I wanted to test a variety of techniques to assess their usefulness for further research in the area.

Second, the use of multiple methods to test the same construct is a “gold standard” approach of cultural psychology. The most famous example may be Vandello and Cohen’s “Southern culture of honor” work, which has incorporated experiments, field observations, surveys, demographic analysis and historical research. Plaut et al (2012) used qualitative and quantitative measures across seven studies to triangulate on culture and well-being. Morling & Lamoreaux (2008) used meta-analysis to compare many different content analyses to measure individualism and collectivism in cultural products, and Kim and Markus (1999) combined abstract and concrete figure analysis to investigate cultural preferences for uniqueness and conformity. No single measure or experiment can possibly hope to capture all aspects of a construct, behavior, or attitude. In addition, there is always the topic of ecological validity to consider. For example, a quantitative approach using carefully controlled lab experiments can eliminate noise and may more readily point to causal factors. However, laboratory experiments often cannot tell you all the ways in which a construct might manifest in general practice in different contexts. Qualitative research can show real-world manifestations of attitudes or concepts, but it can be difficult to process and the results are almost always somewhat of a judgment call. Surveys are fast and cheap, but force choices that might not exist. Using divergent techniques cancels out these errors, and bolsters one’s confidence in the theory or explanation being tested (see Heine, 2012 and Oishi & Snyder, 2009 for further discussions of the importance of multiple method use in cultural psychology).

Finally, given the exploratory and preliminary nature of the present research, it was in some cases difficult to predict what the exact results might be. Cultural psychology is inherently methodologically challenging as cultures can vary greatly on linguistic, cognitive, and other psychological processes in ways that affect responses to psychological measures (Triandis, McCusker & Hui, 1990). Techniques or assumptions that apply for one group thus may not apply for other groups, no matter how similar they may appear. Regional work amplifies this problem. Since sub-regional natives are also natives of the larger culture around them, it can be difficult to separate out subtle differences from the shared mainstream culture, and standard measures are sometimes insufficient to capture them. Using multiple measures increases your chances of capturing the construct of interest. Also, given the paucity of psychological research in some populations, cultural psychologists often use non-psychological studies to shape their theories. It may be that the only available research on a given cultural group has been done on applied topics such as health care, education, or economics. Since these studies may not have been designed to test a particular theoretical construct, they contain a lot of ambiguity. Indeed, on at least one topic of the present study, the available research could reasonably be argued to support completely opposing theories. Given the methodical challenges and the ambiguity in often scant previous research, cultural psychologists have taken care to use multiple methods in order to build stronger inferences about the nature and operation of particular psychological constructions in particular populations.

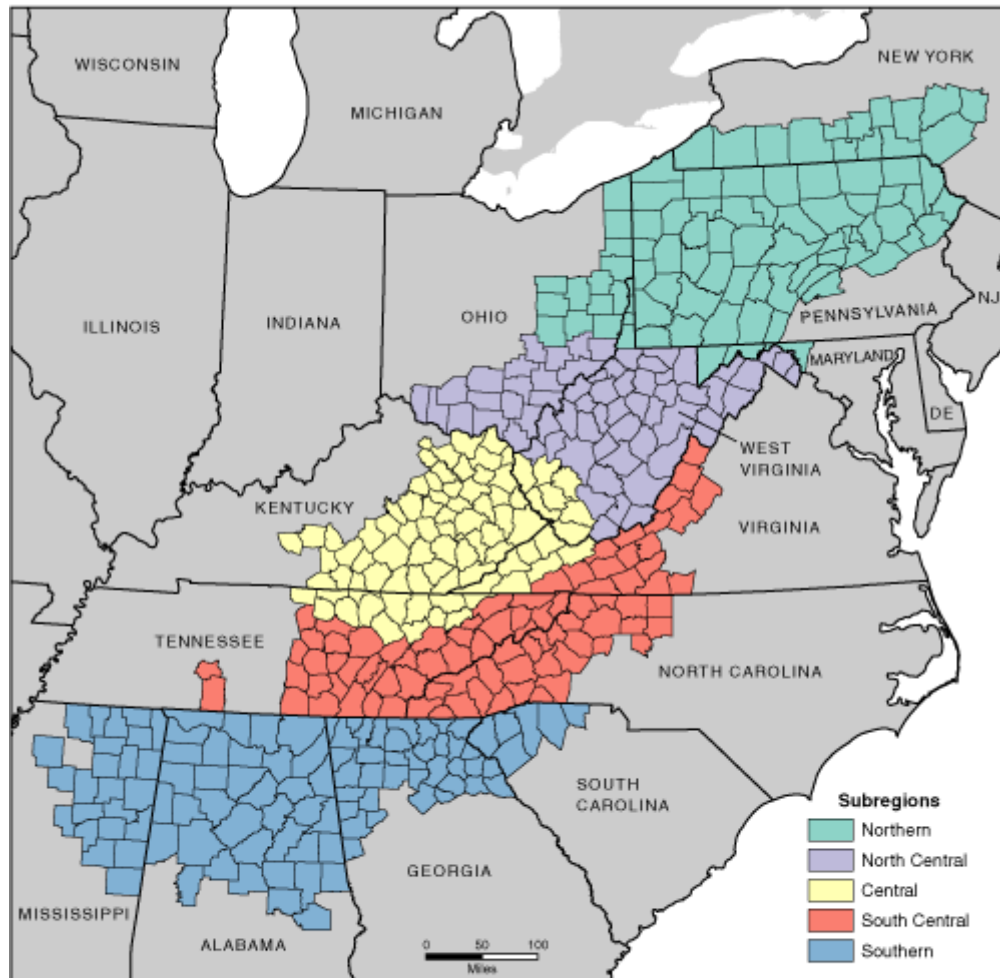
All of these difficulties apply to research in Appalachia, as do other complications particular to the region. While Appalachia has historically been isolated, modern communication techniques have been available in the region for at least seventy years. Further, even the most isolated pockets have histories of outside cultural influence, particularly in educational systems

such as settlement or missionary schools. Several generations of natives have now been exposed to much the same information as those in other regions of the country. Further, Appalachian natives lack the racial and ethnic distinctiveness that offer other minority cultural groups in the U.S. some barriers to cultural assimilation. With the exception of those Cherokee descendants still in the area, Central Appalachian natives are mostly of Scotch-Irish and German descent, just like the population of many parts of the U.S. (ARCC, 2011). By using multiple methods, I increased my chances of moderating these difficulties, strengthening the overall argument of the study, and reaching a more parsimonious explanation for any findings.

The Present Studies

Keeping all these factors in mind, the present studies were designed to apply multiple methods to investigate the I/C construct in Appalachia. Two techniques were used, one qualitative and quantitative. In Study 1, I used a qualitative approach to analyze cultural products both inside and outside of the area. Two products were chosen for this particular study; headlines from online versions of newspapers and university viewbooks used for student recruitment. Both products have been used in the past for cultural psychological research (Gardikiotis, Martin, & Hewstone, 2004; Fu et al., 2013). I selected viewbooks from eight universities that catered primarily to potential students in their local service areas, four from within Appalachia and four from universities near the region, but with a primarily non-Appalachian student profile. I selected four newspapers from towns of comparable size; one from within Appalachia, one from near but not within Appalachia, and two from opposite ends of the country. I analyzed the text of the viewbooks and headlines for evidence of an individualistic or collectivistic approach that would be recognized by their given recruitment or readership populations. In Study 2, I used a quantitative approach to capture I/C using standard

psychological questionnaire measures. These included not only explicit I/C measures, but measures for three other constructs that research has demonstrated can be connected to the I/C construct. These measures cover individual differences, attitudes and behavior. This study used an online sample drawn from Appalachia and the general U.S. population. Thus, in this project I used multiple comparison groups, comparing Appalachian cities and institutions to non-Appalachian cities and institutions similar in size and demographics, and comparing Appalachian natives to the mainstream US population as a whole.



Map by: Appalachian Regional Commission, November 2009.

Figure 1. Map of Appalachia and its sub-regions as defined by counties in the Appalachian Regional Commission.

CHAPTER 2

STUDY 1

Study 1 used a qualitative approach to examine two types of cultural products (newspaper headlines and university viewbooks) for indicators of individualism or collectivism. As discussed in the introduction, cultural products can provide an ecological validity that complements and supports findings obtained through lab experimentation and survey analysis. They demonstrate psychological constructs operating in “the real-world”. They also offer the added benefits of having little to no participant bias or forced-choice dilemmas. For these reasons, I wanted to include a qualitative analysis in this research.

Method

Newspaper Headlines

For this study, I selected newspapers from moderate-sized cities; one from within Appalachia, one from a non-Appalachian city in a state with an Appalachian population, and two from the opposing sides of the country. Moderate-size rather than large cities were chosen because Central Appalachia has only two cities with over 100,000 people (Winston-Salem, North Carolina and Knoxville, Tennessee) so moderate-sized cities are more indicative of the region. Newspapers from smaller cities, on the other hand, might not have been available online, and their micro-local focus might have been less representative of the entire region. In the selection process, I used Census Bureau data to identify the largest cities in the ARC region. To increase the “Appalachian distinctiveness” as discussed in the introduction, I eliminated those cities outside of the Central Appalachian region (such as Pittsburgh, Appalachia’s only major metropolis). I then identified the ten largest cities in Central Appalachia, and eliminated

Winston-Salem and Knoxville for the reason discussed above. In addition, Asheville, North Carolina was eliminated due to a recent tradition of outside influences, particularly among the artistic and counter-cultural communities, which contrasts with some of the region's established cultural norms.

The Appalachian newspaper selected was the *Johnson City Press*, based in Johnson City, Tennessee, the fourth-largest city in Appalachia. Based on Johnson City's demographic data from the 2010 U.S. Census (U.S. Census, 2010), three newspapers from comparable cities were chosen; the *Portland Press-Herald* of Portland, Maine, the *Tri-City Herald* of Kennewick, Washington, and the *Jackson Sun* of Jackson, Tennessee. The demographic criteria used for selection are summarized in Table 1.

I limited the analysis to headlines because headlines are thought to contain the most important elements of a news story, and previous research has provided good results from just headline analyses (Plaut et al., 2012; Gardikiotis et al, 2004). I recorded the front pages at the same time each day for 93 days (all individual newspaper Ns = 93, total N = 372). To mark associations with individualism, I coded headlines for references to individuals celebrating achievements, human interest stories highlighting unique individuals, and stories of new discoveries (science, technology, etc.). For example, headlines such as; "Portland native Andrea Martin wins Tony for role in 'Pippin'", "Torbusch to lead new Bucs football team", or "Arlene's Flowers supporters voice discontent about florist's personal, religious rights". To mark associations with collectivism, I coded headlines for references to community events, charities and other public service organizations, human interest stories highlighting public service individuals, and stories of communities pulling together after crises. Examples would include

“Farming’s appeal grows among young in Maine”, “Jackson wins city livability award”, and “Program offers jobs to homeless”.

Two trained coders coded for differences on individualism/collectivism themes. In particular, the coders were trained to focus on phrasing and framing as an important indicator. For example, one of the samples shown above, ““Torbush to lead new Bucs football team” is phrased in an individualistic manner, since the emphasis is given to Torbush, the individual. A more collectivistic headline conveying the same information might read, “Bucs football team has new coach”, since the focus would be the basis on the football team, rather than the individual coach (see Morling and Lamoreaux, 2008, for a discussion of framing in cultural products). Following my general hypothesis, I expected that the *Johnson City Press*, as an Appalachian paper, would have more collectivistic headlines than the other three. I also expected the *Jackson Sun* might have the next highest number of collectivistic headlines, being the most Southern as well as the closest to Appalachia.

University Viewbooks

I chose to limit the analysis to public regional universities with undergraduate populations between 10,000 and 19,999 students whose primary service regions were either completely or nearly completely in Appalachia, or completely outside of the region. Colleges and universities with student populations below or above this number were deemed too problematic for analysis; large universities because they might seek to attract more students from outside their respective regions, and small colleges because their student populations might be micro-local, and therefore less representative of their regions as a whole. Private universities were also excluded from the analysis. Many of them are religious, and most have high tuition. Therefore, they might be attractive to students for reasons other than location, and their

viewbooks might also be catered to a particular type of student. Demographic and student profile data came from the factbooks supplied by each university's Office of Institutional Research, and which were readily available on each university's website. Again, to increase "Appalachian distinctiveness", only universities within Central Appalachia were chosen. This eliminated "border" universities of the target size, such as Clemson University and The University of North Carolina at Greensboro. The Appalachian universities selected were: Appalachian State University in Boone, North Carolina; Eastern Kentucky University in Richmond, Kentucky; Morehead State University in Morehead, Kentucky; and East Tennessee State University in Johnson City, Tennessee. Four similar universities were selected from states with an Appalachian population, but which tended not to attract Appalachian students. The universities selected were: Bowling Green State University in Bowling Green, Ohio; Middle Tennessee State University in Murfreesboro, Tennessee; Northern Kentucky University in Highland Heights, Kentucky; and the University of North Carolina at Wilmington. The demographic criteria used for selection are summarized in Table 2.

I coded the text from the viewbooks for concepts similar to that used for the newspapers. Lines or sections highlighting achievements, uniqueness and discovery (such as "Our professors will inspire and challenge you to be your best") were coded as individualistic. Lines or sections highlighting community, service, or a welcoming atmosphere (such as "Warm. Friendly. Down to earth.") were coded as collectivistic. The total number of appearances of each theme were then compared by two trained coders. As with the headlines, attention was paid to framing and phrasing. In addition, I counted the words in the text for the appearance of collectivistic and individualistic words. I also marked the page numbers of individualistic-oriented topics (such as academics, accolades, and highlighting successful alumni or notable professors) and

collectivistic-oriented topics (such as student life, study abroad programs, and service learning). Table 3 shows the complete list of words and topics used. I did this to see whether the universities felt their students would be more interested in the individualistic or collectivistic aspects of the school. I also counted the appearances of profiles and quotes from students, professors, and alumni. I did this to gauge whether the university seemed to feel that personal anecdotes and highlighting an academic community (a collectivistic approach) would be more appealing to its intended audience than simple declarations (a top-down, individualistic approach).

Results

Newspaper Headlines

Despite extensive training and discussion, the trained coders could not agree on the coding system, and so kappas did not reach 0.70, which is the commonly accepted lower boundary for inter-rater reliability. I therefore report only the results from one coder. Please note that the results should therefore be interpreted with caution. Percentages for each newspaper on each theme are summarized in Table 4. No significant differences were found between the Appalachian newspaper and the non-Appalachian newspapers for individualistic themes, $\chi^2 = 4.02$, $p = \text{ns}$. Likewise, no significant differences were found for collectivistic themes, $\chi^2 = 2.40$, $p = \text{ns}$.

Viewbooks

As with the newspaper headlines, no kappas for the viewbook analyses reached the 0.70 agreement boundary, even with extensive training. I therefore again report only the results from one coder. Table 5 contains the number of individualistic and collectivistic phrases, the number of individualistic and collectivistic words, and the ratios for individualistic and collectivistic

words and themes for each viewbook. T-tests were conducted using the proportions of words or themes relative to the total word count for each viewbook. There were no significant differences found in total number of individualistic or collectivistic phrases or words between the Appalachian and non-Appalachian viewbooks, $t(6) \leq 1.83$, all $ps = ns$. For the ratios, no significant differences were found for either phrases [$t(6) = 0.68$, $p = ns$] or words [$t(6) = 2.01$, $p = 0.09$]. No significant differences were found on the order in which individualistic [$F(1, 6) = 1$, $p = ns$] or collectivistic aspects [$F(1, 6) = 0.3$, $p = ns$] appeared in the books, or on quotes from students, professors, or alumni, [$F(1, 6) = 0.01$, $p = ns$].

Table 1

Demographic Profiles of Cities Selected for Newspaper Analyses

	Johnson City, TN	Kennewick, WA	Portland, ME	Jackson, TN
2010 population	63,312	73,874	66,194	66,929
% female	51.9	50.1	51.2	53.8
% White	86.9	78.5	85	49.2
% with bachelor's degree or higher	36.1	21.7	44.6	26.5
Median household income	\$38,504	\$51,581	\$44,487	\$37,505

Note. Data from U.S. Census Bureau, 2010.

Table 2

Student Body Profiles of Universities Selected for Viewbook Analyses

	Undergraduates	% Female	% Minority	% Out-of-State
Appalachian State University	15,177	51.3	14	9.5
Eastern Kentucky University	13,891	56.9	16.7	14.4
East Tennessee State University	11,820	57.5	15.5	20.6
Morehead State University	10,076	60.6	8.7	14.1
Bowling Green State University	19,408	55.8	22.6	15
Middle Tennessee State University	17,381	54.3	32.4	7.5
Northern Kentucky University	15,660	60	12.4	35
University of North Carolina at Wilmington	11,571	59.6	19.7	14.8

Note. All figures are 2013-2014.

Table 3

Individualistic and Collectivistic Words Used in Viewbook Analyses

Individualistic	Collectivistic
I	We
Me	Us
Mine	Our
Unique	Community
Special	Home
Desire	Family
Goal	Fit In
Leader	Belong
Dream	Together
Succeed	As One
Success	World
Achieve	Global

Table 4

Percentages for Individualistic and Collectivistic Themes in Newspaper Headlines

Newspaper	% Individualistic	% Collectivistic
Johnson City Press	58.1	41.9
Jackson Sun	65.6	39.6
Portland Press-Herald	72.0	34.4
Tri-City Herald	64.5	45.2

Note. Individual newspaper N = 93, total N = 372. The first newspaper is from Appalachia and the other three are from outside Appalachia.

Table 5

Individualistic and Collectivistic Themes and Words for Viewbooks

	Total Words	# of Ind Themes	# of Coll Themes	Ind to Coll Theme Ratio	# of Ind Words	# of Coll Words	Ind to Coll Word Ratio
Appalachian State	6412	25	17	1.47	44	43	1.02
Eastern Kentucky	2405	18	15	1.20	16	16	1.00
Morehead State	2328	10	14	0.71	11	14	0.79
East Tennessee St.	1442	4	2	2.00	5	3	1.67
UNC-Wilmington	3587	12	14	0.86	11	26	0.42
Middle Tennessee St.	3187	15	11	1.08	16	24	0.67
Northern Kentucky	5481	13	12	1.36	36	40	0.90
Bowling Green St.	4932	18	14	1.29	28	37	0.76

Note. Ind = Individualistic, Coll = Collectivistic. The first four viewbooks are from Appalachia and the last four are from outside Appalachia.

CHAPTER 3

STUDY 2

Study 2 consisted of a series of measures administered via Amazon's Mechanical Turk (mTurk). As discussed in the introduction, these measures were chosen with the multiple models framework in mind. By using a variety of measures, which examined several separate psychological constructs which are all related to the I/C construct, I attempted to obtain a more complete and nuanced look at the nature of collectivism in the region, while also compensating for potential flaws in each separate measure.

Explicit I/C scales

Since Hofstede (1980) first introduced the construct, researchers have developed a number of scales for explicitly measuring I/C at the individual or cultural level. Some have sought to expand on the topic, adding dimensions such as hierarchy (Singelis et al, 1995) and tightness/looseness (Gelfand et al, 2011). In recent years, the reliability and validity of several systems for studying I/C have been called into question (Oyserman & Lee, 2008). While the scales continue to be used, some researchers take the extra step of including multiple scales as a guard against possible reliability and validity issues. I follow that approach here by using two separate I/C scales, both with a long history of use in a variety of research contexts. I predicted that both scales will demonstrate increased collectivism among Appalachian natives.

Compliance

In psychological terms, compliance is one's willingness to agree with someone's request (Cialdini, 2006). Although it is most often studied terms of obedience or marketing, compliance has been used as a social psychological variable in previous research, including investigations

into I/C. For instance, Cialdini et al (1999) found a higher rate of compliance among collectivists than among non-collectivists. Further, they also found that, when told that their neighbors are also complying, collectivists' rates of compliance increased by a greater margin than did individualists. Given the higher rates of conformity usually found in collectivistic cultures, this is perhaps not surprising (Bond & Smith, 1996). Accordingly, I predicted that Appalachian natives will show higher rates of compliance than non-Appalachians. I further predicted that Appalachian natives will show a greater increase in compliance rates than non-Appalachians when told that their neighbors are complying.

Locus of Control

Locus of control involves the techniques people use to attempt to control their environments (Rotter, 1954). Humans report better psychological outcomes when they feel that they are at least partially in control of their environments and situations. The various strategies used to accomplishing this can be organized into two types: primary and secondary techniques. Primary control strategies involve attempting to change the environment. This category includes any control strategy which makes a direct attempt to alter or influence the immediate environment. In contrast, secondary control strategies attempt to change the individual's appraisal of the environment (Lam & Zane, 2004). This category includes strategies in which the individual attempts to change his or her reactions, attitudes, or behaviors associated with the environment. Individuals can choose between these categories based on their assessment of a given situation, but there are also cultural differences in which strategy is given preference. Previous research has shown that individualists tend to use primary control strategies, while collectivists tend to use secondary control strategies (Chun et al, 2006). This is believed to stem from individualists' beliefs that their needs and desires should be asserted over the convenience

of the group or system. Meanwhile, collectivists may prefer to “go along to get along”, and attempt to change their feelings or behaviors in order to better conform to the demands of the situation or environment. Based on this research, I predicted that Appalachians will be more likely to display secondary control strategies than non-Appalachians.

Trust

The exact nature of trust among individualists and collectivists is a matter of some debate. Some previous research has found that increased collectivism is associated with an increase in both generalized trust and trust accorded specifically to particular individuals or groups (Shin & Park, 2005). Familism and reliance on close friends have also long been associated with collectivism (Schwartz et al, 2010). However, other researchers have found a decreased propensity to trust organizations among collectivistic Asian nations than in the individualistic United States (Huff & Kelley, 2003). These differences could be related to whether the trust is cognitively or affectively based (Chen et al, 1998), or they could reflect the risks associated with trusting various individuals or institutions. Collectivism is associated with a great deal of social obligations and duties, and it may be that collectivists are wary of becoming enmeshed with people who may betray them. There is some precedence for this in the literature. For instance, Adams, Anderson, and Adonu (2004) found that, in the collectivistic Ghanaian culture, friends are to be regarded with suspicion, since they are in a greater position to cause harm.

The nature of trust is equally problematic when applied to Appalachia. Since the earliest writings on the area in the late 19th century, Appalachian natives have been consistently portrayed as extremely distrustful of outsiders (Gaventa, 1980; Geisler, 1983). This depiction continues today (Gabriel, 2014). This has been linked to a variety of cultural causes; from

inheriting a clan warfare-based society from the Scottish Highlanders to a history of outside exploitation (Gaventa, 1980; Geisler, 1983). On the other hand, isolation and familism of the kind seen in Appalachia has been associated with increased trust and cooperation for survival or mutual benefit (Geisler, 1983).

These contradictory findings, combined with the lack of direct research on trust in Appalachia, makes predicting results on this topic difficult. My interpretation of the literature, combined with my own experiences as a native of the region, leads me to believe that the Appalachian trust model resembles that of the Ghanaians; the strength of family and community ties, as well as the centrality of the family construct to daily life, mean that families and neighbors are as much a threat as a source of support. Some enemies may come from outside one's immediate circle, but for Appalachians, their perceived threat is not as prescient as that posed by betrayals from friends and family, with whom their lives are deeply entangled. Therefore, I predicted that Appalachian natives will trust their family members and neighbors less than non-Appalachian natives. I also predicted that Appalachians will display lower levels of trust in organizations and institutions than will non-Appalachians.

Method

Participants and Procedure

780 participants were recruited via Amazon's Mechanical Turk (mTurk) website. Of these, 117 were Appalachian natives and 663 were non-Appalachian natives. Appalachian nativity was determined by ZIP code of hometown as provided by the participants in the demographic measure. All participants were United States natives who were 18 years or older and all received \$1.00 in mTurk credit as compensation for their participation.

Participants signed up for the experiment via mTurk. After verifying their age and U.S. residence, participants were directed to follow a link to a Qualtrics page which contained a series of questionnaires. The first page was a pre-screening questionnaire designed to control participation among the non-Appalachian sample, since they far outweighed the Appalachian sample in participation rates. Participants indicated their state of residence. Once a large enough number of participants from non-Appalachian states were obtained, those continuing to try to participate received a brief notice thanking them for their interest, but explaining that the study already had enough participants from their area. For those participants allowed to continue the experiment, informed consent was obtained, and participants completed the measures. Participants were then provided with a debriefing statement, thanked for their time, and given a confirmation code to enter on mTurk to receive their payment.

Demographics for both groups may be found on Table 6. Chi-square analysis revealed no differences between the two samples on any demographics except for rural/urban, $\chi^2(1, N = 779) = 73.94, p < 0.01$.

Materials

Individualism/collectivism (I/C). The first two measures were two standard I/C scales. The first was the Horizontal-Vertical Individualism-Collectivism Scale (Singelis et al, 1995). This is a refinement of the original model, and measures the orientation of a group's I/C construct. Vertical constructs are concerned with social hierarchy and one's place within it; this can be expressed through the vertical individualism of Wall Street or the vertical collectivism of Communist China. Horizontal constructs have less emphasis on social hierarchy, and this can be seen in either the horizontal individualism of artists' communities or the horizontal collectivism of an Israeli kibbutz. The measure consists of 21 Likert-type items which ask the participants to

rate their agreement with a statement, where 1 = *Definitely no* and 9 = *Definitely yes*. Sample statements include “I often do my own thing”, “Competition is the law of nature”, and “It is important to maintain harmony within my group.”

The second measure was the European Social Values Survey version of the Schwartz Human Values Scale (Schwartz, 2003). The Human Values Survey (HVS) has good convergent validity with many of the other common I/C scales, including the Singelis (Oishi & Diener, 2001), and includes unique aspects of the construct, such as an emphasis on communal and contractual relationships. It consists of 21 Likert-scale type items taken from the full HVS, thus making it more compatible with the Singelis scale and so suitable for the present study. The items ask participants to rate how closely a statement describes them, where 1 = *Very much like me*, and 6 = *Not at all like me*. Please note that lower scores indicate more identification with the value, not higher scores as in most measures. The items capture ten values; universalism, tradition, hedonism, self-direction, need for stimulation, power, conformity, benevolence, achievement, and security. Ten of the items measure autonomous values (associated with individualism) and 11 measure embedded values (associated with collectivism).

Compliance. The third measure was the compliance measure taken from the Cialdini et al. article (1999) referenced above. This measure captures willingness to comply with a request under three levels of social influence intensity. Participants read a brief scenario in which they are approached by a marketer asking that they take part in a focus group. Participants are asked to rate their willingness to comply with the request under three social influence conditions: learning that none of your neighbors have complied, that some of your neighbors complied, or that all of your neighbors have complied. Willingness to comply was measured on a 9-point

Likert-type scale, where 0 = *No likelihood of compliance* and 9 = *Very high likelihood of compliance*. The full measure is included as Appendix A.

Locus of control strategies. The fourth measure examined primary and secondary control strategies. This measure was taken from Wrosch, Heckhausen and Lachman (2000), and uses 14 Likert-type items from the Mid-Life in the United States Survey (MIDUS) which focused on ways in which people attempt to control their environments. The measure consists of 14 Likert-type items asking participants to rate their level of agreement with a statement, where 1 = *Not at all* and 4 = *A lot*. Five of the items measure primary control techniques, four measure positive reappraisals as a form of secondary control, and the final five items measure lowered aspirations as a form of secondary control. The full measure is included as Appendix B.

Trust. The fifth measure examined participants' levels of trust in various people and institutions. This measure was compiled from two sources. The first four items cover relational trust, and are taken from the Canadian General Social Survey (Statistics Canada, 2013). Four of the items asked to what degree participants' people in their family, their neighborhood, their school or work colleagues, and strangers. Trust was measured on a scale of 1 to 5, where 1 = *Cannot be trusted at all* and 5 = *Can be trusted a lot*. The other 17 items were taken from the Gallup Institutional Trust Poll (Gallup Organization, 2013). This measure asked for participants' levels of trust in various U.S. national, state, and local government entities, as well as institutions including big and small business, the media and the educational and health care systems. Trust was measured on the same 1 to 5 scale as the previous measure. The full measure is included as Appendix C.

Demographics. The final measure in the packet was a demographic measure. Participants were asked to list the ZIP codes of their current residence and the place they

considered their hometown. These ZIP codes were also used to determine if the participant lived in a rural or urban area based on the Rural-Urban Commuting Area (RUCA) classification system (Rural Health Research Center, 2005). These classifications are based on a combination of each ZIP code's urban/rural status as defined by the U.S. Census, commuter flow within the code's Census-tract, and whether the flow stays within the area or moves through it to a larger urban area. Areas are classified on a scale from 1 to 10, with 1 being a core for a large metropolitan area, and 10 being a completely rural area with little flow to a small urban cluster. For the present study, these codes were condensed such that any ZIP code with a RUCA classification of four or lower was coded "rural". Participants also listed their age, gender, ethnicity, educational and income levels, how close they currently lived to their hometown and how often they saw their relatives while growing up.

Results

I/C Scale Correlations. A bivariate correlational analysis was conducted to confirm that the two I/C scales (Horizontal-Vertical Individualism-Collectivism and HVS) had good convergent validity. I expected that the autonomous values (achievement, power, self-direction, stimulation, and hedonism) would be positively correlated with the individualism scales and negatively correlated with the collectivism scales. The embeddedness values (universalism, benevolence, conformity, tradition, and security) should show the opposite pattern. With a few exceptions, the expected correlations were found (see Table 7).

Singelis Scale. Internal reliabilities (Cronbach's α) were above 0.71 for all four dimensions in both populations (for the Appalachian sample, HI α = 0.77, VI α = 0.87, HC α = 0.88, VC α = 0.81; for the non-Appalachian sample, HI α = 0.82, VI α = 0.85, HC α = 0.86, VC α = 0.79). Both samples showed the same ranking pattern on the four domains. Horizontal

individualism had the highest scores for both samples, then horizontal collectivism, vertical collectivism, and the lowest scores were for vertical individualism (See Table 8 for the means and standard deviations for the HVIC subscales).

Analysis of variance (ANOVA) revealed that Appalachians ($M = 7.20$) score higher on horizontal individualism than non-Appalachians ($M = 6.93$), $F(1, 753) = 7.34$, $p < 0.01$. There were no significant differences on the vertical individualism scale or the two collectivism scales. Further analyses revealed that rural Appalachian natives ($M = 6.87$) scored significantly higher on horizontal collectivism than urban Appalachian natives ($M = 6.18$), $F(1, 114) = 6.32$, $p = 0.01$. In contrast, rural non-Appalachians ($M = 5.68$) were significantly higher on vertical collectivism than urban non-Appalachians ($M = 5.33$), $F(1, 644) = 7.40$, $p < 0.01$. No rural/urban differences were found on individualism for either group.

Factor Analysis. In order to obtain a more nuanced look at the nature of individualism and collectivism in Appalachia, I performed a maximum likelihood factor analysis (with direct oblimin oblique rotation) on the Singelis responses. Prior research has found that the Singelis items are not orthogonal, therefore, a confirmatory factor analysis and an oblique rotation was appropriate. Two factors were found for horizontal individualism, two for vertical individualism, and two for vertical collectivism. Horizontal collectivism did not have any factors (See Table 9 for the items contained in each factor). ANOVAs revealed that Appalachian natives ($M = 7.27$) were significantly higher than non-Appalachians ($M = 6.96$) on HIUnique, a horizontal individualism factor which contained items concerned with uniqueness, privacy, and “doing one’s own thing”, $F(1, 776) = 8.326$, $p < 0.01$. No other significant differences were found.

Further analysis revealed that when rural/urban differences were taken into account, rural Appalachian natives ($M = 6.42$) were marginally significantly more likely than their urban counterparts ($M = 5.94$) to score highly on VCHierarchy, a vertical collectivism factor which contained items concerned with the proper care of children and the elderly, $F(1, 116) = 3.06, p = 0.08$. Rural non-Appalachians ($M = 6.52$) also scored marginally significantly more highly on VCHierarchy than urban non-Appalachians ($M = 6.27$), $F(1, 654) = 3.59, p = 0.06$. Rural non-Appalachians ($M = 5.18$) also scored significantly higher than urban non-Appalachians ($M = 4.77$) on VCSacrifice, a vertical collectivism factor containing items concerned with making personal sacrifices or concessions for the sake of group harmony, $F(1, 652) = 6.99, p < 0.01$.

Schwartz Value Scale. Again, when interpreting results for the HVS, it should be noted that lower means in fact demonstrate a *stronger* identification with the values in question.

Internal reliabilities (Cronbach's α) were above 0.71 for both dimensions in both samples (for the Appalachian sample, Autonomy $\alpha = 0.86$, Embeddedness $\alpha = 0.84$; for the non-Appalachian sample, Autonomy $\alpha = 0.81$, Embeddedness $\alpha = 0.82$).

ANOVAs revealed that Appalachians scored significantly higher on autonomous values ($M = 3.1$) than non-Appalachians ($M = 3.27$), $F(1, 767) = 4.94, p = 0.03$. Appalachians ($M = 2.72$) also score higher than non-Appalachians ($M = 2.92$) on the embedded values, $F(1, 767) = 2.27, p = 0.02$. Repeated-measures ANOVAs found that that Appalachians identify significantly more strongly with the embedded values than the non-Appalachians, $F(1, 112) = 11.4, p = 0.01$. Non-Appalachians also identified more strongly with the embedded values, $F(1, 623) = 71.87, p < 0.01$. Comparing rural Appalachians to urban Appalachians revealed that urban Appalachians ($M = 2.9$) were marginally significantly less likely to rate embedded values highly than rural

Appalachians ($M = 2.60$), $F(1, 112) = 3.11, p = 0.08$. No significant differences on either autonomous or embedded values were found for rural and urban non-Appalachian natives.

Further analysis revealed several differences on the ten sub-values between Appalachians and non-Appalachians. Table 10 contains the full list with means and standard deviations.

Appalachian natives rated self-direction [$F(1, 774) = 10.13, p < 0.01$], universalism [$F(1, 772) = 8.67, p < 0.01$], stimulation [$F(1, 770) = 4.37, p = 0.04$], and tradition [$F(1, 774) = 7.04, p < 0.01$] more highly than did non-Appalachians.

Schwartz (2003) does not recommend performing exploratory factor analysis on HVS responses. However, he does suggest four overarching relationships between the values. They are self-transcendence (universalism and benevolence), which is opposed to self-enhancement (achievement and power). Likewise, openness to change (hedonism, stimulation and self-direction) is opposed to conservation (security, tradition, and conformity). Figure 2 shows the complete circumplex. ANOVAs revealed that Appalachians ($M = 2.35$) are significantly higher on self-transcendence than non-Appalachians ($M = 2.59$), $F(1, 769) = 5.41, p = 0.02$.

Appalachians ($M = 2.84$) were also significantly higher on openness to change than non-Appalachians ($M = 3.09$), $F(1, 763) = 7.59, p < 0.01$. Rural Appalachians ($M = 2.18$) were significantly higher on self-transcendence than urban Appalachians ($M = 2.59$), $F(1, 113) = 4.65, p = 0.03$. There were no significant differences between rural and urban non-Appalachians.

Compliance measures. ANOVA revealed that Appalachian natives were significantly more compliant than non-Appalachian natives across all three conditions. Compliance was highest in the “all neighbors comply” condition (Appalachian mean = 3.67, non-Appalachian mean = 3.03), $F(1, 777) = 10.8, p < 0.01$. Compliance decreased for the “some neighbors comply” condition (Appalachian $M = 3.53$, non-Appalachian $M = 2.91$), $F(1, 777) = 10.8, p <$

0.01. Compliance was lowest in the “no neighbors comply” condition (Appalachian $M = 3.45$, non-Appalachian $M = 2.82$), $F(1, 776) = 10.72, p < 0.01$. Adding the rural/urban factor increased these differences among Appalachians. Rural Appalachians ($M = 3.84$) were significantly more likely to comply than urban Appalachians ($M = 3.06$) when half of their neighbors complied, $F(1, 116) = 4.36, p = 0.04$. Rural Appalachians ($M = 3.96$) were also marginally significantly more compliant than urban Appalachians ($M = 3.23$) when all their neighbors complied, $F(1, 116) = 3.52, p = 0.06$, and when none of their neighbors complied (rural $M = 3.74$, urban $M = 3.02$), $F(1, 116) = 3.43, p = 0.07$. Rural non-Appalachians ($M = 3.28$) were marginally significantly more likely than their urban counterparts ($M = 2.97$) to comply when all their neighbors complied, $F(1, 660) = 3.12, p = 0.08$. No other significant differences were found for non-Appalachians on compliance.

Control strategies. Initial ANOVAs revealed that Appalachian natives ($M = 2.93$) were marginally significantly more likely to use lowered expectations as a secondary control strategy than non-Appalachians ($M = 2.79$), $F(1, 778) = 2.85, p = 0.09$. No significant differences between Appalachians and non-Appalachian natives on use of primary control strategies or on the use of positive appraisals as secondary control strategies. Introducing the rural/urban factor yielded no significant results for either Appalachians or non-Appalachians.

Trust measures. The findings for the relational trust measures for Appalachians and non-Appalachians are summarized in Table 11. Appalachians significantly trust their neighbors less than do than non-Appalachians. Appalachians also trust strangers less than non-Appalachians, and they are marginally significantly more likely to distrust their colleagues than non-Appalachians. Appalachians are also more likely to distrust their family, but this was not significant. Adding the rural/urban component revealed that rural Appalachians ($M = 3.83$) were

marginally significantly less likely to trust their family than urban Appalachians ($M = 4.15$), $F(1, 116) = 3.26$, $p = 0.07$. No other significant differences were found between rural and urban non-Appalachians. Among non-Appalachians, urban dwellers ($M = 2.88$) were significantly less likely to trust their neighbors than their rural counterparts ($M = 3.06$), $F(1, 660) = 4.39$, $p = 0.04$. Urban dwellers ($M = 3.08$) were also significantly less likely to trust their colleagues than rural dwellers ($M = 3.27$), $F(1, 660) = 5.08$, $p = 0.02$.

The findings for the institutional trust measure for Appalachians are also summarized in Table 11. Appalachians were significantly more likely to trust the church than non-Appalachians. They were also marginally more likely to distrust the Presidency and the Supreme Court than non-Appalachians. Rural Appalachians ($M = 2.54$) differed from urban Appalachians ($M = 2.17$) only on their marginally greater trust in the health care system, $F(1, 116) = 3.42$, $p = 0.07$. In contrast, the rural non-Appalachians showed greater trust in several institutions (see Table 12).

Factor Analysis. In order to look for patterns in trust between the two groups, I performed an exploratory principal components factor analysis with varimax rotation on both trust measures combined. Since this measure has never been examined in this way, I made no assumptions as to orthogonality. Therefore, an exploratory analysis was appropriate. The complete factor loadings are summarized on Table 13. The four relational trust items loaded on one factor, which I labeled Relational Trust. The five government items loaded on a second factor, which I labeled Government. The church, military, banks, and big business loaded on a third factor, which I labeled Large Institutions. Newspapers, TV news, the Internet, the public school system, the health care system and unions loaded on a fourth factor, which I labeled

Education and Service. Small business and the criminal justice system did not load strongly on any one factor.

ANOVAs revealed that Appalachians ($M = 2.91$) are significantly lower on relational trust than non-Appalachians ($M = 3.08$), $F(1, 778) = 5.9, p = 0.02$. Appalachians are also marginally significantly lower on governmental trust than non-Appalachians ($M = 2.35$), $F(1, 767) = 2.94, p = 0.09$. There were no significant differences between rural and urban Appalachians on any of these factors. Among non-Appalachians, however, there were striking differences between rural and urban dwellers. Rural dwellers (rural $M = 3.18$, urban $M = 3.05$) were higher on relational trust, $F(1, 660) = 4.48, p = 0.04$. They were also higher (rural $M = 2.65$, urban $M = 2.45$) on trust of large institutions, $F(1, 653) = 5.46, p = 0.02$. Finally, rural non-Appalachians ($M = 2.7$) were higher than urban non-Appalachians ($M = 2.53$) on trust of educational and public services, $F(1, 651) = 5.83, p = 0.02$. A bivariate correlational analysis was performed to test the relationship between these trust measures and the I/C measures (the four dimensions of the HVIC scale, the ten HVS subvalues and the four HVS relational value groups). Trust in large institutions was moderately negatively correlated with conservation, $r(774) = -0.37, p < 0.01$. It was also moderately negatively correlated with conformity, $r(762) = -0.34, p < 0.01$. Relational trust was moderately correlated with horizontal collectivism, $r(762) = 0.33, p < 0.01$.

Table 6

Demographic Profiles of Appalachian and Non-Appalachian Participants

	Appalachian	Non-Appalachian
% Female	47.9	51.5
% White	86.6	81
Age Range	18-72	18-74
Average Age	34	33
% Rural	59.8	21.5
% < \$60,000 per year	66.4	68.6
% with Associate's	53.1	51
Degree or less		

Table 7

Correlations between Singelis I/C Measures and Schwartz Autonomous and Embedded Values

	Mean HI	Mean VI	Mean HC	Mean VC
Mean SD	.30**	-.10**	-.18**	-.40**
Mean ST	.12**	.11**	-0.4	-.20**
Mean HE	.13**	.15**	-.13	-.21**
Mean AC	.10**	.42**	-.11**	-.05
Mean PO	.03	.42**	-.27**	-.04
Mean BE	-.15**	-.25**	.38**	.11**
Mean UN	-.04	-.39**	.26**	-.06
Mean CO	-.26**	-.10**	.10**	.41**
Mean TR	-.22**	-.31**	.19**	.27**
Mean SE	-.08*	-.08*	.07*	.22**

Note. SD = Self-Direction, ST = Stimulation, HE = Hedonism, AC = Achievement, PO = Power, BE = Benevolence, UN = Universalism, CO = Conformity, TR = Tradition, SE = Security

** Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed).

Table 8

Mean Scores on the Singelis Horizontal-Vertical Scale

	N	HIMean	SD	VIMean	SD	HCMean	SD	VCMean	SD
Appalachian	117	7.20	0.96	4.66	1.70	6.60	1.48	5.43	1.54
Non-Appalachian	653	6.93	1.01	4.71	1.50	6.54	1.33	5.40	1.33
Rural Appalachian	70	7.30	0.97	4.53	1.78	6.87	1.40	5.57	1.68
Urban Appalachian	47	7.06	0.93	4.85	1.57	6.18	1.51	5.21	1.28
Rural Non-Appalachian	141	6.90	1.05	4.81	1.46	6.67	1.35	5.68	1.35
Urban Non-Appalachian	515	6.93	1.00	4.69	1.51	6.50	1.32	5.33	1.31

Table 9

Factor Loadings for Singelis Horizontal-Vertical Items

Type	Item	HIUn	HIAb	VISo	VICo	VCSa	VCHi
HI	I often do my own thing.	.59					
HI	One should live one's life independently of others.	.50					
HI	I like my privacy.	.52					
HI	I prefer to be direct and forthright when discussing with people.	.44					
HI	I am a unique individual.	.81					
HI	I enjoy being unique and different from others in many ways.	.77					
HI	What happens to me is my own doing.		.49				
HI	When I succeed, it is usually because of my abilities.		.99				
VI	It annoys me when other people perform better than I do.			.67			
VI	When another person does better than I do, I get tense and aroused.			.99			
VI	Competition is the law of nature.				.74		
VI	Without competition, it is not possible to have a good society.				.64		
VI	Winning is everything.				.53		
VI	It is important that I do my job better than others.				.68		
VI	I enjoy working in situations involving competition with others.				.76		
VI	Some people emphasize winning; I'm not one of them.				.53		
VC	I would sacrifice an activity that I enjoy very much if my family did not approve of it.					.84	
VC	I would do what would please my family, even if I detested that activity.					.89	
VC	Before taking a trip, I consult with most members of my family and many friends.					.59	
VC	I usually sacrifice my self-interest for the benefit of my group.					.64	
VC	I hate to disagree with others in my group.					.38	
VC	Children should be taught to place duty before pleasure.						.29
VC	We should keep aging parents with us at home.						.47
VC	Children should feel honored if their parents receive a distinguished award.						.70
HC	The well-being of my coworkers is important to me.						
HC	If a co-worker gets a prize, I would feel proud.						
HC	If a relative were in financial difficulty, I would help within my means.						
HC	It is important to maintain harmony within my group.						
HC	I like sharing little things with my neighbors.						
HC	I feel good when I cooperate with others.						
HC	My happiness depends very much on the happiness of those around me.						
HC	To me, pleasure is spending time with others.						

Note. HI = Horizontal Individualism, VI = Vertical Individualism, HC = Horizontal Collectivism, VC = Vertical Collectivism, HIUn = HIUnique, HIAb = HIAbilities, VISo = VISoreLoser, VICo = VCCompetitor, VCSa = VCSacrifice, and VCHi = VCHierarchy. Horizontal collectivism did not load on any factors. The items are included here for comparison purposes.

Table 10

Mean Scores on the Schwartz Scale Sub-Values

	Appalachian	Non-Appalachian
N	117	657
Mean Self-Direction	2.16*	2.50*
SD	1.03	1.09
Mean Achievement	3.11	3.27
SD	1.36	1.20
Mean Power	3.73	3.79
SD	1.30	1.14
Mean Stimulation	3.05*	3.32*
SD	1.47	1.27
Mean Hedonism	3.30	3.46
SD	1.23	1.17
Mean Universalism	2.29*	2.61*
SD	1.06	1.08
Mean Benevolence	2.41	2.56
SD	1.19	1.15
Mean Conformity	3.40	3.54
SD	1.39	1.23
Mean Tradition	2.73*	3.03*
SD	1.12	1.13
Mean Security	2.96	3.06
SD	1.24	1.16

Note. * indicates differences significant at $p = 0.05$.

Table 11

Analysis of Variance Findings for Relational and Institutional Trust Measures

	Appalachian	Non-Appalachian	F	<i>p</i>
Mean Family (SD)	3.96 (0.95)	4.10 (0.90)	2.51	ns
Mean Neighbors	2.74 (1.0)	2.92 (0.92)	3.94	0.04
Mean Colleagues	2.97 (0.91)	3.12 (0.90)	2.73	0.90
Mean Strangers	1.99 (0.77)	2.16 (0.87)	4.00	0.05
Mean Congress	1.90 (0.09)	1.98 (1.0)	0.72	ns
Mean Presidency	2.14 (1.01)	2.34 (1.12)	3.32	0.07
Mean Supreme Court	2.44 (1.13)	2.65 (1.12)	3.47	0.07
Mean State Government	2.25 (0.92)	2.34 (1.01)	0.81	ns
Mean Local Government	2.34 (1.02)	2.47 (1.03)	1.63	ns
Mean Church/Religion	2.94 (1.29)	2.69 (1.27)	3.98	0.05
Mean Military	2.71 (1.16)	2.84 (1.16)	1.32	ns
Mean Banks	2.41 (1.03)	2.35 (1.14)	0.31	ns
Mean Big Business	2.01 (0.89)	2.12 (1.0)	1.24	ns
Mean Small Business	3.08 (0.88)	3.10 (0.90)	0.05	ns
Mean Newspapers	2.56 (0.92)	2.58 (0.97)	0.02	ns
Mean TV News	2.43 (0.93)	2.43 (0.97)	0.00	ns
Mean Internet	2.56 (0.89)	2.53 (0.84)	0.13	ns
Mean Public Schools	2.75 (1.00)	2.82 (1.02)	0.48	ns
Mean Criminal Justice System	2.44 (0.99)	2.61 (1.0)	2.62	ns
Mean Health Care System	2.40 (1.06)	2.50 (1.03)	0.97	ns
Mean Unions/Labor	2.64 (0.94)	2.57 (1.01)	0.53	ns

Note. N = 779.

Table 12

Analysis of Variance for Non-Appalachians on the Institutional Trust Measure

Trust Item	Urban Mean	Rural Mean	df	<i>F</i>	<i>p</i>
Congress	1.97	2.02	1, 661	0.35	ns
Presidency	2.33	2.39	1, 661	0.36	ns
Supreme Court	2.62	2.75	1, 661	1.59	ns
State Government	2.34	2.34	1, 661	0.00	ns
Local Government	2.47	2.50	1, 661	0.12	ns
Church	2.65	2.83	1, 661	2.38	ns
Military	2.78	3.07	1, 661	7.23	0.00
Banks	2.29	2.56	1, 661	5.90	0.02
Big Business	2.10	2.18	1, 661	0.78	ns
Small Business	3.06	3.23	1, 661	3.59	0.06
Newspapers	2.55	2.68	1, 661	2.04	ns
TV News	2.40	2.55	1, 661	2.80	0.09
Internet	2.53	2.55	1, 661	0.07	ns
Public Schools	2.77	3.00	1, 661	5.50	0.02
Criminal Justice	2.57	2.74	1, 661	3.25	0.07
Health Care	2.47	2.61	1, 661	1.94	ns
Unions	2.51	2.80	1, 661	9.31	0.00

Note. N = 662

Table 13

Factor Loadings for Trust Measure Items

	Relational	Government	Large Institution	Education/Service
Family	.50			
Neighbors	.83			
Colleagues	.79			
Strangers	.74			
Congress		.78		
Presidency		.84		
Supreme Court		.77		
State Gov.		.78		
Local Gov.		.72		
Church/Religion			.74	
Military			.65	
Banks			.77	
Big Business			.75	
Newspapers				.79
TV News				.73
Internet				.69
Health Care Sys.				.49
Public Schools				.64
Unions				.64
Justice System				
Small Business				

Note. Criminal Justice System and Small Business did not load on any single factor.

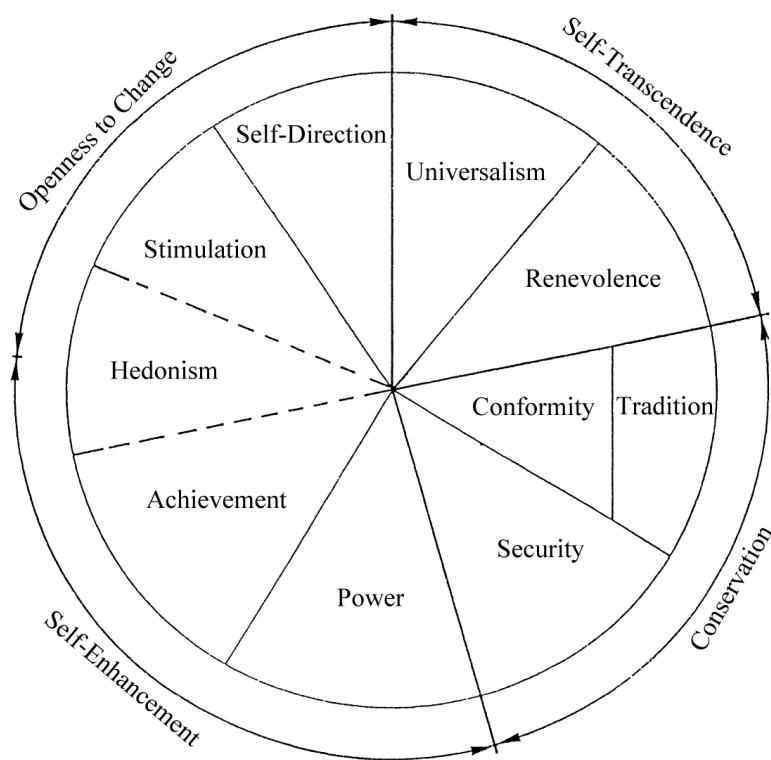


Figure 2: Relationships between the Schwartz values.

CHAPTER 4

GENERAL DISCUSSION

While Appalachia has a reputation for being individualistic, even surpassing a U.S. culture renowned for its individualism, sociological and anthropological evidence suggests that culture and region possess several tendencies often associated with collectivism. With little psychological research done on the area, it is difficult to make predictions either way, or to define the exact relationships between individualism and collectivism in the region. The present project sought to examine the existence and nature of the region's, I/C profile, and add to the body of knowledge about the area through a multiple-methods cultural psychological approach.

Study 1

The lack of any significant differences on the cultural products is somewhat surprising, given that both newspapers and viewbooks have been used successfully in previous research. There could be several explanations. Of the newspapers, three (the *Johnson City Press*, the *Jackson Sun*, and the *Portland Press-Herald*) are owned by large media corporations (Gannet, McClatchy, and Sandusky, respectively). These papers might therefore pull more stories from the Associated Press or their parent companies wire services than locally-owned small town newspapers. Indeed, a cursory comparison between the *Jackson Sun* and the *Lexington Herald-Leader* of Lexington, Kentucky (also a McClatchy paper) revealed that the two papers were extremely similar in tone, topic coverage, and appearance. Another potential problem with moderate-sized city newspapers might be the focus of their coverage. Enough news happens in cities and regions of these sizes so that small local-interest stories (where greater deviations might be found) are de-prioritized as opposed to more general-interest news. However, except

for occasional special series (which did not occur during the research time frame), these newspapers often may not have the staff to maintain a broader spectrum of coverage such as that found at large urban or national papers. Qualitative methods researchers might be interested in further investigating the topic of newspaper size with regards to socio-cultural studies.

The viewbooks might be potentially more insightful in future research. Non-parametric Mann-Whitney tests revealed the same results except for a significant difference on collectivistic word count. This appeared to be driven entirely by East Tennessee State University's low total word count. However, viewbooks also pose content challenges similar to that of the newspaper headlines. Academic culture, with its emphasis on achievement and success, is inherently individualistic. Although smaller groups within the whole might increase collectivism on small scales, the viewbook speaks for the university as a whole. Also, 10,000 to 19,999 students might represent an "unhappy medium" between more distinctive larger and smaller institutions. Regional universities of this size might feel that it is possible to move up into the higher ranking tiers, and so focus on topics like achievement, national accolades, and high-ranking alumni. In the process, they become more individualistic than they might have previously been. An additional problem stems from the rise in new technology. In response to a high school population who spend most of their time online, traditional printed viewbooks, or even eBook versions of them, are becoming rarer. Universities seem to increasingly let the school websites serve as a potential student's means of exploring the school. Several eligible universities were rejected from this study due to the lack of a readily available traditional or online viewbook. As this particular cultural artifact continues to change, those viewbooks that remain in printed form may become increasingly generic and standardized, and so less well-suited to this form of qualitative research.

Study 2

On first glance, the most direct result from Study 2 is that, contrary to my hypothesis, Appalachians are not higher on collectivism. In fact, they are higher on horizontal individualism than non-Appalachians. It is perhaps not surprising to see that both samples scored highest on horizontal individualism, given the fact that these are all mostly white U.S. natives with similar levels of income and education. Likewise, it is not surprising that among both samples, the rural participants were more collectivistic than the urban ones, since collectivism is associated with rural living.

Looking deeper into these measures, however, some very interesting patterns emerge. While Appalachians were higher on horizontal individualism as a whole, factor analysis allowed us to see that their scores were highly driven by the items dealing specifically with individuality. Appalachia is a very homogenous environment in both geography and demographics, and experiences little in unusual events or occurrences. Economic and social changes occur slowly if at all. Given this, it may be that Appalachians place an inordinately high value on individuality as a way to distinguish themselves from each other. It could also be a response to being tightly enmeshed in familial and social networks, with individuals struggling to separate themselves from their families and friends. In that case, this specific horizontal individualism factor suddenly becomes rooted in more collectivistic concerns, an intriguing idea that warrants further study in its own right.

Another interesting finding is that although both rural populations are more collectivistic, rural Appalachians are more likely to be horizontally collectivistic, while rural non-Appalachians are more likely to be vertically collectivistic. This could be due to several factors. One potential cause is that Appalachians put a strong emphasis on self-sufficiency. Vertical collectivism

implies working together as a collective, and Appalachians, while happy to offer assistance if asked, prefer to maintain privacy and independence, even when working in a group. Also, Appalachians in general take a very dim view of hierarchy and “airs.” Depending on the circumstances, Appalachians are quick to minimize both their accomplishments and their setbacks. While this behavior is certainly allied with horizontal rather than vertical behavior, it is most definitely collective in nature. Collectivists are strongly invested in social harmony, and maintaining your position in the social environment is as collectivistic and conflict-avoidance-focused a behavior as the indirect speech patterns discussed in the introduction.

On the Schwartz Value Scale, Appalachians identified more strongly with both autonomous and embedded values. This indicates that Appalachians may have different cognitive means of processing values, or may include their values as a part of their identity to a greater degree than non-Appalachians do. Both Appalachians and non-Appalachians were more likely to identify with the embedded values than the autonomous ones, which is somewhat surprising. This might be a product of the demographics of the non-Appalachian sample, which is of lower-income than the general U.S. population, as lower incomes are associated with embedded values.

The HVS revealed two interesting (and stereotype-busting) findings. Appalachians are higher on self-transcendence, which is in contrast to the common “ornery violent hillbilly” stereotype. Analysis of the individual items reveals that this is primarily driven by the universalism measure, since Appalachians are not particularly high on benevolence. I propose that this reflects the Appalachian emphasis on “live and let live”, and on the culture’s tolerance for differences, which is remarkable for such a rural culture. Appalachians are also higher on openness to change, which again flies in the face of the recalcitrant and old-fashioned

stereotypes that have been associated with the region. It is interesting, however, that Appalachians also value tradition highly, which is completely opposed to openness to change on the value circle. This might speak less to the fact that Appalachians value tradition and more that they highly *disvalue* security and conformity. Neither is surprising; we have already seen that Appalachians value individuality, and in such an economically depressed and unhealthy region, it is hard to put much faith in security.

The compliance measures indicate that Appalachians are far more compliant than non-Appalachians, regardless of whether they believed their neighbors complied or not. Higher compliance would be more consistent with collectivistic individuals, thus making this a possible indicator of higher collectivism in Appalachia. This becomes even more likely when we consider that rural Appalachians show an increased propensity to comply, while rural non-Appalachians do not. One possible interpretation is that Appalachians may feel uncomfortable when presented with such a direct request, and comply out of a feeling of obligation. Hearing that one's neighbors had also complied would have exacerbated the response. Even so, this can be taken as an indicator of a tendency towards collectivism, especially given the degree of compliance.

Consistent with expectations, Appalachians were somewhat more likely to use lowered expectations as a control strategy. This strategy would likely come more easily to residents of an economically depressed region than putting a positive outlook forward. The fact that non-Appalachians did not engage in primary control strategies was surprising, but might be explained by the lower-than-average income of the mTurkers.

On the trust measures, we see that in general, Appalachians are much more distrustful than non-Appalachians. Of the relationships and institutions examined, the only exception to

this distrustfulness is the one institution that many Appalachians have deep connections with, the church. Appalachians tend to be deeply religious as a group (Keefe, 2012), and it would be more shocking if the results of the study showed distrust of the church. Although many churches in the region are not associated with formal denominations or conventions (and the region has several sects that exist nowhere else, such as the Old Regular Baptists), churches as a whole form their own sort of institution for Appalachians, one that is as fundamental to daily life as the Catholic Church might be to a cardinal or nun.

Perhaps the most interesting finding from the trust measures was that Appalachians have a lower level of relational trust. This hearkens back to the Ghanaian comparisons discussed in the introduction (See Adams, 2005): Appalachians may trust their family and close neighbors less *because* their lives are so entangled, not *despite* it. The present study revealed a few moderate correlations, the most relevant being a correlation between relational trust and horizontal collectivism. This could be a potential factor in Appalachians' lower scores on horizontal collectivism; the ability to trust other people. The current I/C measures may fail to capture this trust component of collectivism.

Limitations and Future Directions

As discussed in the introduction, these studies were an initial attempt at explicitly examining individualism and collectivism in Appalachia. As such, several limitations were unavoidable. One issue to consider is the use of an online sample to collect responses from an Appalachian population. Online samples are a good way to obtain results from groups that are traditionally difficult to study, such as rural populations or those with limited mobility. Research has found that they are generally as valid as the traditional survey research methods. However, the Appalachian population presents some potential problems. The fact that the Appalachian

sample matches so well with the mainstream sample on education and income, given the region's known disparities on these metrics, points to the possibility of sample selection artifacts.

Although computer ownership and use is growing in Appalachia, reliable Internet access can still be irregular. Many of the less educated and lower income residents of the region may still lack systematic access, and this population might differ somewhat on I/C. It took longer and was more difficult to obtain mTurk participants from the region, indicating that there may be sample selection artifacts in this sample. Conversely, the problem might lie with the mainstream sample. U.S. based mTurkers are generally more highly educated and have less income than the mainstream U.S., which could lead to potential confounds (Ross et al, 2010). Future studies should either make provisions for this in their sampling technique, whether by contacting participants through other online means or through the use of field researchers to work with participants in person.

The use of an online study also led to possible limitations in the measures chosen. Since the measures were all part of a set of measures to be completed at a single sitting, they were chosen to be as short and straightforward as possible. Many of the best compliance and locus of control measures consist of lab-based experiments, which were not feasible for this study. Using these experimental measures in future research may yield stronger results.

For the qualitative study, the viewbooks presented a low number of data points for comparison. The findings from the non-parametric tests suggest that further research with a broader set of data points might prove more fruitful.

As with any study using a large number of items, there is some risk of increased familywise error. In order to mitigate against increased Type I error, we made sure to use composite measures and data reduction strategies where appropriate. We note that one should

exercise caution in interpreting results where there were many individual variables, such as the 20 trust variables. In this case in particular it may be prudent to consult the results for the reduced set of four trust factors.

Given the conflicting nature of many of the results, the possibilities for future studies are endless. One intriguing possible study would be comparing Appalachians' ideas about themselves with more objective markers. Similar to the differences between objective and subjective well-being, there could be a chronic cultural difference between Appalachians' self-identity and the objective reality. Also, Appalachians could be tested for cognitive differences associated with collectivism, such as certain kinds of contextual processing. More research could also be done on collectivism in cultural products, such as local TV commercials and advertisements. These might provide greater insights than standardized products such as newspapers or viewbooks.

Conclusion

While this study did not provide clear and certain support for the hypothesis, I believe that there are enough interesting and unusual findings that further investigation is not only desirable, but necessary. On the one hand, Appalachians are high on horizontal individualism, identify with autonomous values, value self-direction and stimulation, and are more distrustful of their families and colleagues than other U.S. residents. These findings are often associated with individualism. On the other hand, Appalachians are far more compliant than the U.S. mainstream, also identify with embedded values, value universalism and tradition, are more likely to use at least one secondary control strategy, and lower relational trust can be interpreted as an indicator of collectivism as well. Rural Appalachians also seem to differ from their non-Appalachian rural counterparts in several ways, including type of collectivism and the nature of

trust. Taken all together, these results are suggestive that, while whole societies may lean individualistic or collectivistic, regions or sub-cultures within those societies may have a more complex I/C profile. In particular, Appalachia's individualistic and collectivistic traits seem to be as tightly bound together as the social networks they reflect. The results, therefore, are as complicated and intriguing as the region itself. The Appalachian people; friendly but wary, quick to give help and reluctant to ask for it, independent, yet deeply tied to their family, homes, and traditions, will likely continue to give researchers problems for years to come. Speaking as both a researcher and an Appalachian, I, and they, wouldn't want it any other way.

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0	1	2	3	4	5	6	7	8
Not at all								Definitely would

APPENDIX B

Locus of Control Measure

Please answer the following questions by indicating the number that best captures your agreement with the statement.

1	2	3	4
Not at all			A lot

1. When things don't go according to my plans, my motto is, "Where there's a will, there's a way."
2. When faced with a bad situation, I do what I can do to change it for better.
3. Even when I feel I have too much to do, I find a way to get it all done.
4. When I encounter problems, I don't give up until I solve them.
5. I rarely give up on something I am doing, even when things get tough.
6. I find I usually learn something meaningful from a difficult situation.
7. When faced with a bad situation, it helps to find a different way of looking at things.
8. Even when everything seems to be going wrong, I can usually find a bright side to the situation.
9. I can find something positive, even in the worst situations.
10. When my expectations are not being met, I lower my expectations.
11. To avoid disappointments, I don't set my goals too high.
12. I feel relieved when I let go of some of my responsibilities.
13. I often remind myself that I can't do everything.
14. When I can't get what I want, I assume my goals must be unrealistic.

APPENDIX C

Trust Measure

Please answer the first four questions using the scale below. How much do you trust the following groups of people?

1	2	3	4	5
Not at all				A lot

1. People in your family?
2. People in your neighborhood?
3. People you work or go to school with?
4. Strangers?

Here is a list of institutions in American society. Using the same 1 to 5 scale, how much trust do you have in these institutions?

5. Congress
6. The presidency
7. The U.S. Supreme Court
8. Your state government
9. Your local government
10. The church/organized religion
11. The military
12. Banks/financial institutions

13. Big business
14. Small business
15. Newspapers
16. Television news
17. The public school system
18. The criminal justice system
19. The health care system
20. Organized labor