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People Like Us: Shaping Newcomer Acceptance in Rural Boomtown Communities and Schools

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Abstract

Rapidly growing rural communities may experience many forms of disruptions, jeopardizing residents' place attachment and identity. This qualitative case study uses the boomtown and newcomer/oldtimer literatures to examine how schools shape the local 'us-versus-them' discourse. Data for this research include interviews with community members (n=27) and interviews and observations of K–12 school staff (n=14). Findings indicate boomtown residents and teachers strengthened their place identity and attributed place disruptions and risks to newcomers, inhibiting their acceptance. Administrators' planning decisions and teachers' pedagogy in practice shaped this discourse. Teachers reinforced newcomer resistance by presenting them as symbols of disruption and risk which threatened their traditional rural community identity.

Keywords: resource booms; rural schools; newcomer acceptance; policy

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1.0 Introduction

The recent surge in oil production in North Dakota's Bakken Oil Shale represented another wave of energy growth in the region. Putz, Finken, & Goreham (2011) noted that the oil boom began in 2008, whereby "the number of producing oil wells in North Dakota exceeded 5,000 wells in 2010, an increase of nearly 2,000 wells over the decade. Production exceeded 10 million barrels per month, a three-fold increase over the decade" (p. 8). The scale and effects from this energy boom were so large that data from the Energy Information Administration shows that in recent years North Dakota's oil boom cut the United States' net oil and petroleum imports in half (EIA, 2015). This development was all spurred by technological advancements in horizontal drilling and hydraulic fracturing and favorable economic policies at the state and federal levels that resulted in a rapid influx of itinerant workers seeking job opportunities in the Bakken Shale region. While the rest of the country suffered through up to 8% unemployment in 2012, the oil industry in North Dakota created over 30,000 energy-related jobs in the state from 2008–2012, and even more in retail, health, education, and industrial sectors (Tyson, 2012). At the peak of the oil boom, the unemployment rate for North Dakota dropped to 2.7% in April 2014 (Wolla, 2015, May).

The areas affected by the North Dakota oil boom growth were almost exclusively rural, and the unremitting development caused substantial effects on communities and local institutions. For example, the oil boom provided an unprecedented economic stimulus for the state, local businesses, and many individuals (Beckman, 2012); however, rural communities experiencing higher levels of development often face challenges. For instance, rapid community development often stresses social services in some communities (Weber, Geigle, & Barkdull, 2014), leading to increased calls for police services (Dahle & Archbold, 2015), causes critical housing shortages (Jacquet, 2009), and increases vehicle traffic on the roads leading to safety concerns (Haefel & Morton, 2009).

The communities under examination in the present study experienced dramatic growth as an influx of itinerant workers migrated to the region. The two communities in this study are small; one community had a population of about 800 residents, the other had approximately 300 residents before the onset of development. However, between the years 2010–2014, the rural county in which both communities were located grew from a population of about 2,200 to over 2,700 (United States Census Bureau, 2016). On the heels of century-long population decline, these rural residents were now confronted with the potential for record population growth (up to 25% projected growth within five years), new traffic, new population demographics, and infrastructure construction.

The communities in this study are presented as one case due to their connections. The towns share a consolidated school and many services. Residents in these rural communities had recently endured outmigration, and social, economic, and demographic changes. Consequently, the schools also experienced change. While other rural research has studied the effects of boomtown growth on rural communities, little effort has been put forth examining the teacher practices of those embedded in such areas. The purpose of this qualitative case study was to explore how rural boomtown residents' community perceptions affected their acceptance of newcomers, and how school staff members' practices shaped the discourse of newcomer acceptance among students.

2.0 Social Disruption and Boomtown Models

Social scientists define areas that experience rapid population growth, and social and economic changes from natural resource-based extraction, as *boomtowns* (Brasier et al., 2011; Brown, Dorius, & Krannich, 2005). Research on energy boomtowns has found that residents often report a generalized crisis when development begins (Albrecht, 1978; Cortese & Jones, 1977; England & Albrecht, 1984; Finsterbusch, 1982; Freudenburg, 1981; Freudenburg, Bacigalupi, & Landoll-Young 1982; Freudenburg & Jones, 1991; Gilmore & Duff, 1975; Kohrs, 1974). However, what social scientists called the *social disruption hypothesis* was debated extensively. Scholars called for more rigorous methodologies,[1] and longitudinal studies that identify *which* communities and *which* residents experienced change and to what degree (Freudenburg, 1984). Research began to show that residents' attitudes about their communities and energy extraction changed *before* the onset of development (Brown, Dorius, & Krannich, 2005), and longitudinal studies that examined residents' perceptions of their communities over the pre-boom, boom, and post-

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[1] For debate of the social disruption model, see England & Albrecht, 1984; Finsterbusch, 1982; Freudenburg, 1982; Gale, 1982; Murdock, Leistritz, & Hamm, 1986; Wilkinson, 1984; and Wilkinson et al., 1982.

boom stages, showed that long-time residents' attitudes remained the most stable over the 25-year life-course of development (Smith, Krannich, & Hunter, 2001). Newcomers who migrated to energy boomtowns reported fearing crime more than other community members, and remained stable throughout development's phases. Even though men largely reap the economic benefits from energy development (Gilmore & Duff, 1975), female residents were shown to adapt more successfully to boomtown life (Freudenburg, 1981), and exhibited higher levels of community satisfaction than longtime male residents during energy booms (Brown, Dorius, & Krannich, 2005).

Contemporary research on energy development has largely chronicled residents' perceptions, while omitting the role of school educators in shaping these perceptions. For example, researchers' studies have framed residents' perceptions of development (Forsyth, Luthra, & Bankston, 2007), residents' perceptions of change (Anderson & Theodori, 2009, Brasier et al., 2011; Theodori, 2009; Willits, Luloff, & Theodori, 2013), crime rates (Luthra, Bankston, Kalich, & Forsyth, 2007), energy workers' perceptions of stigma (Filteau, 2015b), local leaders' perceptions of risk and change (Brasier et al. 2013; Crowe, Ceresola, & Silva, 2015; Schafft, Borlu, & Glenna, 2013), and views among New York and Pennsylvania residents (Stedman et al., 2012).

There are exceptions to the predominance of studies that overlook the influence of school administrators and teachers in shaping local perceptions of development. Schafft, Glenna, Green, and Borlu, (2014) examined educational administrators' perspectives of development and demonstrated that their respondents perceived both positive and negative impacts from development. They did not find net enrollment increases in their study locations, but found that without a state severance tax, school districts in highly developed areas may bear more burdens than they receive, because these districts "cannot expect to see a significant increases in local revenue associated with gas development" (Schafft et al., 2014, p. 13). In Pennsylvania's rural school districts, structural constraints (e.g. standardized testing and high-stakes testing assessments) prevented administrators from creating job training programs within the public schools, and the inevitable bust associated with oil and gas extraction generated uncertainty among administrators responsible for advising students on potential career paths (Schafft & Biddle 2014). Schafft and Biddle (2014) also raised an important question that we address in the present paper: to what extent do schools and local institutions assist rural communities when adapting to or mitigating rapid changes from energy development?

Adie and Barton (2012) studied pre-service teachers' rural pedagogy and sense of place, finding that the interwoven relationship of rural teachers and their communities makes rural sense of place unique to other contexts. There appeared to be a deeper sense of identity among rural teachers since they were actively involved in shaping the community and interacting within community social structures. To investigate rural boomtown educators' understanding of their community Schafft and Biddle (2014) found that boomtown teachers lived the experiences of community members and thus expressed some ambivalence toward the changes happening in the space outside of the school. The authors advocated for a pedagogical positioning that allowed schools and educators to respond to community changes. Further investigation is warranted regarding educational practices and decision-making within these particular school contexts.

This is an important area of inquiry for two reasons. First, rural boomtown residents who do not accept newcomers may form negative attitudes about the changes occurring within the community, and vice versa (Chang, 2010; Wielgosz, Brown, & Lategola, 2000). Residents who perceive positive benefits of social change may be more likely to support their schools (Miller, 1995), yet the addition of new residents can create social strain (Baxter, Eyles, & Elliot, 1999). Second, this area of inquiry is necessary because schools play a role in teaching identity and values. The local community influences how personal identities are formed in the classroom (Semken & Freeman, 2008). Values acculturation within rural schools, also influenced by locality, may explain the formation of place identities later on (Gamradt & Avery, 1992). The question emerges: do boomtown teachers' educational practices, affected by their perceptions as residents of the larger community, reinforce rural identity and place? We know that students' place identities and community values are reinforced through pedagogy, curricula, and classroom artifacts (Allen & Schlereth, 1992). Therefore, this study aims to examine acceptance of newcomers from both a community member perspective and how acceptance is shaped within the classroom discourse of a rural boomtown school district.

3.0 Methodology

This embedded single case study investigated a school district over a 12 month period during early boomtown growth. The embedded units, school staff and residents, are "subcases" (Yin, 2011, p. 7) of analysis. The case represented a consolidated school district with two elementary schools (K–6) and one high school (7–12). It was considered a single case because the district consolidation bound the communities and schools; changes in one affected the other, and the research was also bound in the timeframe of the first school year following boomtown growth within the community. Additionally, the analysis revealed transcendent themes with little difference based on location context. A social constructivist perspective guided the research. The theoretical assumption of much qualitative research is that individuals construct experiential meaning from their realities through social exchanges and environmental interpretation (Creswell, 2013), and interviews and observations can elicit participants' realities.

Residents within the district boundaries were included as potential participants in the research. Purposeful selection of residents captured population heterogeneity (Maxwell, 2013), particularly in the areas of length of residency (ranging from less than one year to 78 years) and residents' role in the community. A selection of participants (fewer than 10) as purposefully selected based upon their role in the community, and the remaining names were generated through snowballing and sampling at community observation sites. Forty-one participants volunteered for formal, semi-structured interviews (Creswell, 2013; Roulston, 2010), including follow-up interviews with 13 participants. They represented 27 community members such as business owners and workers; farmers, retired and unemployed individuals; emergency medical responders, police officers, and government officials. All residents in this study were White, which was similar to the overall community demographics of both towns (the larger community > 97% White, the smaller community > 99% White; United States Census Bureau, 2016). The school staff participants included 14 school staff members comprised of 12 K–12 teachers and two administrators. Questions were developed from literature and observations. Interviews lasted 25 to 45 minutes and were transcribed verbatim by the researcher.

Partial participant classroom observations occurred over 12 months for a total of 180 hours. All classroom teaching staff but five were observed, and administrators were not included in the observations. Typically, observations each lasted four to six hours over three visits and were meant to observe pedagogical practices and inform the interview questions. Observation notes and interview transcripts were chunked and labeled during an open coding process (Leech & Onwuegbuzie, 2007).

Interview transcripts were coded using NVivo qualitative data analysis software (QSR International Pty Ltd., 2010) with an open coding system. The analysis followed a general inductive approach (Thomas, 2006). The researcher labeled and grouped participant and observation data based upon pattern or similarity (Creswell, 2013). Some codes were established a priori from literature; others emerged from the data itself. Codes were added, applied, and re-conceptualized in subsequent transcripts until achieving data saturation (Maxwell, 2013), or to a point at which no new data emerged and analysis was complete.

The final codes were the most prominent representations of the participant responses, and were "developed to form a description [and] identify the themes" (Creswell, 2009, p. 20). Findings were organized into themes that elucidated conceptual relationships within the case (Maxwell, 2013). The findings were sent to a colleague familiar with this research, and the two researchers corresponded to discuss and compare analyses. Through the correspondences, the two agreed upon final "major findings" (Creswell, 2009, p. 189) of the case, and the final themes were identified within the social and school context as Identity, Place Disruptions, and Risk Attributions. An additional analysis of the data and literature review further examined specific teacher curricular and pedagogical decision-making that occurred as a result of those findings. Validation was obtained through member checking with participants, peer debriefing with experts in the field of boomtown literature, and data triangulation (Creswell, 2013).

4.0 Findings

These small communities began to feel the full effect of boomtown growth in 2010, just prior to this research. It was an unusual experience for community members to see new people. In these small towns, residents understood the importance of growth. However, with the new population came threats to community identity, disruptions to their daily lives, and perceived risks. Residents were unaccepting of newcomers who did not fit their place identity. The changes in the area impacted not only residents' lives, but administrators and teachers were left to confront them in the schools. Some of the disruptions felt in the community manifested directly in the classrooms, while others were addressed directly or indirectly by teachers in their lessons, their communication with students, or in the way the administration developed policies for the district. Residents attributed community disruptions and risks with newcomers, and teachers' pedagogy reinforced place identity and perpetuated newcomer distrust.

4.1 Identity

There was a strong sense of identity present in these two rural communities. This identity was explicitly defined as an accepted values set embracing religion and community engagement. To assimilate, newcomers must embrace those values. One resident explained:

> It used to be that new people could get accepted. They were fine not going to bars. They could socialize at church. Now we're seeing people who go to bars and don't care to get socialized and they don't get accepted.

Another resident confirmed: "If they want to be accepted...they need to be a part of it, or they'll get shunned." When asked how they could be a part of the community, she felt they need to volunteer at the school, go to church, and shop at local stores.

Residents defined and reinforced their place identity through establishing a norm set of behaviors described by several residents as "people like us." One explained: "Now there are too many people in town who aren't [town name]-like people. They're transients." Whiteness was another facet of 'people like us' identity. All participants in this study self-identified as White, and some residents described minorities as the agitators. A businessperson reported: "I don't know if I should say this, but because of the Mexicans...we gotta triple check to make sure everything's locked up." However, residents with economic growth incentives were less likely to apply an outsider identity when discussing newcomers. A bar owner said of the newcomers: "They're usually good guys. They're no trouble and they tip well."

Vehicles were a primary symbol of identity within these communities. Residents prided their ability to drive in the snowy, wintery conditions, and likened newcomers' driving skills to their outsider status, as one 78-year resident commented: "The trucks drive around here and they're terrible at driving…they're not used to driving in the snow." Previously a county with little measurable traffic, the traffic also increased over the course of this study. Between 2009 and 2010, the North Dakota Department of Transportation (North Dakota Department of Transportation [NDDOT], 2009 & 2010) reported that traffic in the county increased by 275 vehicles a day, which included 130 commercial trucks. However, the next year, the county's traffic averaged an additional 2,400 daily vehicles, including 1,400 commercial trucks (NDDOT, 2010 & 2011). In that year, the 19-mile highway between the two communities in this study alone accounted for an additional 1,000 vehicles on the road daily, including about 600 commercial trucks.

The conspicuous change in traffic that resulted from the additional vehicles, and the universal dislike of it among participants, manifested in classrooms, where teachers perpetuated 'people like us' identity by discussing driving skills. During a lesson, an elementary teacher told students that newcomers would wreck in the snow, unlike current residents, who were capable of winter driving. Secondary teachers also reminded students to be cautious on the road because "all of the new cars" were poor drivers. Four times during the observations, elementary teachers led discussions with students about local oil truck accidents, guiding the classes to understand that they needed to be careful because of the newcomers' driving habits: speeding and tailgating on the roadways. Rarely did teachers acknowledge that the longtime North Dakota residents might be at fault, and two examples of accidents discussed with students were later deemed to be the fault of long-time residents.

4.2 Place Disruptions & Community Aesthetics

Residents and teachers of these communities were ambivalent to the disruptions caused by the rapid growth, including disruptions to community aesthetics, their traditional rural trust, and housing. Aesthetic conditions were the most visible place disruptions. Residents felt newcomers' mobile homes parked on residential lots impacted aesthetics. One noted: "Although [newcomers] spend money in town,

they're a burden...and can make the city look pretty bad." Another resident, who had lived in the community for 15 years, planned to sell his home and move away, saying: "The area has just changed. It's faster, dirtier, more industrial. It's not the place me and my wife wanted to retire when we first moved here." Other teachers let the aesthetic disruptions permeate into their pedagogical discourse. During a lesson, an elementary teacher brought her class outside to clean the schoolyard. She pointed to a newcomer's mobile home, announcing: "We want to make sure we stay clean, so the school doesn't look like that."

Community changes made residents feel traditional values were at stake. One resident remarked: "We used to be safe, but you have all the new people messing around. I want the old North Dakota back." These perceptions appeared to decrease newcomer trust among some residents. At an auto repair center, when a repair was finished, the mechanic once parked cars on the street with the keys inside. With the new growth, a resident explained: "[Mechanics] wouldn't do that anymore. Less trust." There was a sense that the growth, and the type of people who were a part of the in-migration, were negatively affecting local community dynamics and social relations in the area.

Potential financial gains served as buffers to disruptions. One resident's home was worth tenfold its purchase price. He remarked: "I used to mind the trailers and traffic. We have new people...but the good is the [home] values now. I never thought mine could get this high." The higher home values, for instance, reached the point of being unaffordable for many residents, particularly those on fixed incomes. As a result of available oil industry jobs, housing markets in western North Dakota soared during the early stages of the oil boom, making affordable housing difficult to find. According to the local real estate data, homes that sold in the larger community at hand in 2007 averaged $58,400, while the average home price in 2012 was $125,600. In just the second half of 2012, the eight homes that sold in this town averaged nearly $158,000. The mayor of one of the communities stated:

There are absolutely no houses for sale anymore, which is something that just happened in the last year...I get calls every day from people looking for homes, and have to tell them we don't have anything. I say, 'Nope, try again in a month.' That's something that I've never had to do before.

Teachers often described how community changes altered academic dynamics in the school. For example, teachers believed newcomers' occupations, and the disruptions to housing within the region, caused poor academic performance among new students. A principal felt most students were academically behind: "[Parents] move and are working so much, they don't have the time to devote or feel that there's a need for it." A teacher confirmed: "Dad and mom are working or out, they don't get to bed on time...Parents are tired, so kids get tired." Several teachers felt unable to help new students. One noted: "We see things in the new kids, transients, that we don't see from our own. There was a new girl, couldn't hardly read. We didn't know what to do with her."

4.3 Risk Attribution

As residents felt threats to their established community identity and disruptions to their community space, they attributed risks to newcomers. Real and perceived crime accompanied the growth. The sheriff confirmed: "We started to get a lot more calls...It's the people moving in...young oil guys had too much to drink." Those with

positive economic stakes in the growth were also concerned about newcomer crime, but tended to overlook it. A resident confirmed: "Hate the traffic, the greed, the crime. The only people who want it here are moneymakers." Another resident, after discussing new crime, followed up: "But hey, my home's worth three times what I bought it for, so I'm not minding it as much."

A teacher echoed community perceptions of risks: "New people that you don't recognize...I wish the people didn't come...What's coming into the schools is problems." One teacher was concerned about new students' risky behaviors: "There are students that have come in, and they're bringing drugs...Difference in attitude...Any kids that come in, their work ethic is just not there." She felt it was the administration's job to address these issues. As such, administrators installed 16 security cameras in the schools. The superintendent explained: "They needed to go up. We saw the possibility of new issues with the new people, and wanted to nip it in the bud...things like crime...things that come with new people." Most teachers accepted the security cameras, but several, like the elementary music teacher, believed, "They're spying on us, I think. I'm just uncomfortable that anyone can be watching whenever they want. We don't need that here."

Other teachers, who were also community residents themselves, perceived new community crime and taught safety lessons. One explained: "You see all the crime in the area and I'm worried about my (students). More people here, so you never know. I remind them daily, don't talk to strangers." Other teachers lectured their students about how to 'stay safe' in the community when they encountered newcomers. As one teacher explained: "We have drinking problems with kids around here anyway, and I've talked to them before about not getting involved with people or things that we see here, a lot of young guys drinking. Some oil, some locals." At the end of one lesson, he told the class not to "let any of these new guys influence what you do. Make smart decisions." Teachers prompted students to lock their car doors so personal items would not get stolen. Prior to this, many residents in these communities felt no need to lock their cars or homes, as was explained by nearly every participant in this study. Now, the teachers knew it was not realistic to maintain old senses of security.

Community identity, place disruptions, and risk attributions inhibited newcomer acceptance, and school staff shaped the local discourse of acceptance through their decisions and practices within the walls of the schools. An oil worker confirmed the difficulty of feeling accepted in these communities. After living in the town six months, he explained: "Well, let's just say you're the first person who's come up and talked to me. People avoid me. [They] just look away."

5.0 Discussion

Residents and teachers clearly defined and strengthened place identities in the face of perceived risks to their communities, resultantly attributing risks and socially excluding newcomers. Previous research on old-timers in energy boomtowns demonstrates how old-timers often perceive newcomers as a threat to the community's social relations (Murdock & Leistreitz 1982; England & Albrecht 1984; Schafft et al. 2014) and the natural environment (Brasier et al. 2011, 2013). In the present study, these threats materialized as disruptions to physical (aesthetics), social (population influx), economic (housing), and psychological (risks) systems (Gramling & Freudenburg, 1992). This research responds to the newest calls to illuminate specific points of social contention and examine factors inhibiting

newcomer acceptance in energy development contexts (Filteau, 2015a). Residents in this study used place-protective language ('people like us'), ideological symbolism (religion), and artifact symbolism (personal property) to differentiate in-group from out group members and further disassociate newcomers from the community.

This was reinforced at the community's institutional level by administrators who installed security cameras, and implicitly and explicitly by teachers who shaped the local discourse. Through their lectures to students, teachers framed outsider cultures, practices, and people as a threat to the community. This finding complements previous research, whereby newcomers are excluded from community institutions and stigmatized (Parkins & Angell 2011; Filteau 2015b) and rarely become integrated into the community regardless of how long they reside there (Salamon 2003; Gosnell & Abrams, 2011). This exclusion may contribute to lower happiness scores (Freudenburg 1981) and a greater fear of crime (Hunter, Krannich, & Smith 2002) among newcomers who feel targeted.

It is important to note that although there were some new students, the schools did not experience a significant increase in their student bodies. This is likely due to similar findings that new, younger male energy sector workers were not often bringing their families with them as they migrated to the work sites (Brasier et al., 2015). We can assert from these findings that educators expressed ambivalence to the changes as they perceived risks resulting from their role as rural community members, but their attitudes were likely not a result of changes in their teaching experiences themselves.

This research adds what none has yet examined: boomtown newcomer resistance as a pedagogical feature. Boomtown educators operate in complex sociocultural and political arenas, about which they may have little understanding or power to change (Schafft & Biddle, 2014). It can be assumed that teachers, as typical of many boomtown residents, perceived disruption risks (Beckman, 2012) and appeared to operationalize their pedagogy to affirm place identity as a place-protective action (Devine-Wright, 2009). The findings here suggest that teachers taught their students that newcomers threatened their community and posed risks to safety, aesthetics, and education.

These results are contextual and cannot be generalized to other areas. It should be noted that this research, like other current literature, did not identify the sources of community member or school staff member satisfaction. Further research should identify pedagogical and social constructs affecting resistance to change in other rural contexts, particularly students' and newcomers' acculturation to regions and transforming identities in changing places. More research should also further examine factors supporting or marginalizing racial minority newcomers in traditionally Caucasian rural regions. It is also sensible for researchers to get to the heart of where risk attributions emerge within modern, rapidly growing communities – what role do media, social media, and community networks play in communicating risk and identity? By doing so, planners can better anticipate and provide efforts to inform residents of changes, while promoting newcomer acceptance within these types of communities.

References

Adie, L., & Barton, G. (2012). Urban pre-service teachers' conceptions of teaching in rural communities. *Australian Journal of Teacher Education*, *37*(6), 111-123.

Albrecht, S. L. (1978). Socio-cultural factors and energy resource development in rural areas in the West. *Journal of Environmental Management, 7*(1), 90-93.

Allen, B., & Schlereth, T. J. (Eds.) (1992). *Sense of place: American regional cultures.* Lexington: University Press of Kentucky.

Anderson, B. J., & Theodori, G. L. (2009). Local leaders' perceptions of energy development in the Barnett Shale. *Southern Rural Sociology, 24*(1), 113-129.

Baxter, J., Eyles, J., & Elliot, S. (1999). 'Something happened': The relevance of the risk society for describing the sitting process for a municipal landfill. *Geografiska Annaler, Series B, Human Geography, 81*(2), 91- 109.

Beckman, J. (2012). *Energy impact solutions models project, September 2012, Final report.* Department of Energy Award Whitepaper. Dickinson, ND. Retrieved from:
http://www.visionwestnd.com/documents/SolutionModelsFinalReport.pdf

Brasier, K.J., Filteau, M.R., McLaughlin, D.K., Jacquet, J., Stedman, R.C., Kelsey, T.W., & Goetz, S.J. (2011). Residents' perceptions of community and environmental impacts from development of natural gas in the Marcellus Shale: A comparison of Pennsylvania and New York cases. *Journal of Rural Social Sciences, 26*(1), 32-61.

Brasier, K. J., Davis, L., Glenna, L., Kelsey, T. W., McLaughlin, D. K., Schafft, K., Babbie, K., Biddle, C., DeLessio-Parson, A., Rhubart, D., & Suchyta, M. (2015). Communities experiencing shale gas development. In *Economics of Unconventional Shale Gas Development* (pp. 149-178). Springer International Publishing.

Brasier, K. J., McLaughlin, D. K., Rhubart, D., Stedman, R. C., Filteau, M. R., & Jacquet, J. (2013). Risk perceptions of natural gas development in the Marcellus Shale. *Environmental Practice*, *15*(02), 108-122.

Brown, R. B., Dorius, S. F, & Krannich, R. S. (2005). The boom-bust recovery cycle: Dynamics of change in community satisfaction and social integrations in Delta, UT. *Rural Sociology, 70*(1), 28-49.

Chang, C. (2010). *Resident attitudes toward community development alternatives.* (Unpublished doctoral dissertation). Utah State University, Logan, UT.

Cortese, C.F., & Jones, B. (1977). The sociological analysis of boomtowns. *Western Sociological Review, 8*(1), 76-91.

Creswell, J.W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches.* Thousand Oaks: SAGE.

Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Thousand Oaks: SAGE.

Crowe, J., Ceresola, R., & Silva, T. (2015). The influence of value orientations, personal beliefs, and knowledge about resource extraction on local leaders' positions on shale development. *Rural Sociology*, *80*(4), 397-430.

Dahle, T. O., & Archbold, C. A. (2015). "Just do what you can […] make it work!" Exploring the impact of rapid population growth on police organizations in western North Dakota. *Policing: An International Journal of Police Strategies & Management*, *38*(4), 805-819.

Devine-Wright, P. (2009). Rethinking NIMBYism: The role of place attachment and place identity in explaining place-protective action. *Journal of Community & Applied Social Psychology*, *19*(6), 426-441.

England, J. L., & Albrecht, S. L. (1984). Boomtowns and social disruption. *Rural Sociology*, *49*(2), 230.

Filteau, M. R. (2015b). Go Back to Texas, gas bastards! How a newcomer population of itinerant energy workers manage dirty work stigma in the Marcellus Shale Region. *Society & Natural Resources*, *28*(11), 1153-1167.

Forsyth, C. J., Luthra, A. D., & Bankston, W. B. (2007). Framing perceptions of oil development and social disruption. *The Social Science Journal*, *44*(2), 287-299.

Finsterbusch, K. (1982). Boomtown disruption thesis: Assessment of current status. *Pacific Sociological Review*, *25*(30), 307-322.

Freudenburg, W. R. (1981). Women and men in an energy boomtown: adjustment, alienation, and adaptation. *Rural Sociology*, *46*(2), 220.

Freudenburg, W. R. (1982). Balance and bias in boomtown research. *Pacific Sociological Review*, *25*(3), 323-338.

Freudenburg, W. R. (1984). Boomtown's youth: The differential impacts of rapid community growth on adolescents and adults. *American Sociological Review, 49*(5), 697-705.

Freudenburg, W. R., Bacigalupi, L. M., & Landoll-Young, C. (1982). Mental health consequences of rapid community growth: A report from the longitudinal study of boomtown mental health impacts. *Journal of Health and Human Resources Administration, 4*(3), 334-52.

Freudenburg, W. R., & Jones, R. E. (1991). Criminal behavior and rapid community growth: Examining the evidence. *Rural Sociology*, *56*(4), 619-645.

Gale, R. P. (1982). Local social disruption and Western energy development: A critical review commentary. *Pacific Sociological Review*, *25*(3), 339-348.

Gamradt, J. A., & Avery, P. G. (1992). Country kids, city kids: Community context and geopolitical identity. *Journal of Research in Rural Education 8*(1), 61-74.

Gilmore, J. S., & Duff, M. K. (1975). *Boom town growth management: A case study of Rock Springs-Green River, Wyoming*. Westview Press.

Gosnell, H., & Abrams, J. (2011). Amenity migration: diverse conceptualizations of drivers, socioeconomic dimensions, and emerging challenges. *GeoJournal*, *76*(4), 303-322.

Gramling, R., & Freudenburg, W. R. (1992). Opportunity-threat, development, and adaptation: Toward a comprehensive framework for social impact assessment. *Rural Sociology*, *57*(2), 216-234.

Haefele, M., & Morton, P. (2009). The influence of the pace and scale of energy development on communities: Lessons from the natural gas drilling boom in the Rocky Mountains. *Western Economics Forum, 8*(2), 1-13.

Hunter, L. M., Krannich, R. S., & Smith, M. D. (2002. Rural migration, rapid growth, and fear of crime. *Rural Sociology, 67*(1), 71-89.

Jacquet, J. (2009). Energy boomtowns & natural gas: Implications for Marcellus Shale local governments & rural communities. *NERCRD Rural Development Paper*, 43.

Kohrs, E. V. (1974, April). *Social consequences of boom growth in Wyoming.* Presented at the regional meetings of the Rocky Mountain Association for the Advancement of Science, April, Laramie, WY.

Leech, N. L., & Onwuegbuzie, A. J. (2007). An array of qualitative data analysis tools: A call for data analysis triangulation. *School Psychology Quarterly, 22*(4), 557-584.

Luthra, A. D., Bankston, W. B., Kalich, D. M., & Forsyth, C. J. (2007). Economic fluctuation and crime: A time-series analysis of the effects of oil development in the coastal regions of Louisiana. *Deviant Behavior*, *28*(2), 113-130.

Maxwell, J. (2013). *Qualitative research design: An interactive approach* (3rd ed.). Thousand Oaks: SAGE.

Miller, B. (1995). The role of rural schools in community development: Policy issues and implications. *Journal of Research in Rural Education, 11*(3), 163-172.

Murdock, S. H., Leistritz, F. L., & Hamm, R. R. (1986). The state of Socioeconomic Impact Analysis in the United States: An examination of existing evidence, limitations and opportunities for alternative futures. *Impact Assessment*, *4*(3-4), 99-132.

North Dakota Department of Transportation (NDDOT) (2009-2011). 2009, 2010, 2011, T*raffic volume map of North Dakota.* NDDOT/Asset Management Division.

Parkins, J. R., & Angell, A. C. (2011). Linking social structure, fragmentation, and substance abuse in a resource-based community. *Community, Work & Family 14*(1), 39-55.

Putz, A., Finken, A., & Goreham, G. A. (2011). Sustainability in natural resource-dependent regions that experienced boom-bust-recovery cycles: Lessons learned from a review of the literature. *Center for Community Vitality Working Paper*.

QSR International Pty Ltd (2010). NVivo qualitative data analysis software, Version 9.

Roulston, K. (2010). *Reflective interviewing: A guide to theory & practice.* Los Angeles: SAGE Publications.

Salamon, S. (2003). From Hometown to nontown: Rural community effects of suburbanization. *Rural Sociology*, *68*(1), 1-24.

Schafft, K. A., & Biddle, C. (2014). School and community impacts of hydraulic fracturing within Pennsylvania's Marcellus Shale region, and the dilemmas of educational leadership in gasfield boomtowns. *Peabody Journal of Education*, *89*(5), 670-682.

Schafft, K. A., Borlu, Y., & Glenna, L. (2013). The relationship between Marcellus Shale gas development in Pennsylvania and local perceptions of risk and opportunity. *Rural Sociology*, *78*(2), 143-166.

Schafft, K. A., Glenna, L. L., Green, B., & Borlu, Y. (2014). Local impacts of unconventional gas development within Pennsylvania's Marcellus Shale Region: gauging boomtown development through the perspectives of educational administrators. *Society & Natural Resources, 27*(4), 389-404.

Semken, S., & Freeman, C. B. (2008). Sense of place in the practice and assessment of place-based science teaching. *Science Education, 92*, 1042-1057.

Smith, M. D., Krannich, R. S., & Hunter, L. M. (2001). Growth, decline, stability, and disruption: A longitudinal analysis of social well-being in four western rural communities. *Rural Sociology, 66*(3), 425-450.

Stedman, R. C., Jacquet, J. B., Filteau, M. R., Willits, F. K., Brasier, K. J., & McLaughlin, D. K. (2012). Environmental reviews and case studies: Marcellus shale gas development and new boomtown research: Views of New York and Pennsylvania residents. *Environmental Practice*, *14*(4), 382-393.

Theodori, G. L. (2009). Paradoxical perceptions of problems associated with unconventional natural gas development. *Southern Rural Sociology*, *24*(3), 97.

Thomas, D. R. (2006). A general inductive approach for analyzing qualitative evaluation data. *American Journal of Evaluation*, *27*(2), 237-246.

Tyson, R. (2012). On the way to 1 million barrels. *Petroleum News Bakken, 1*(4), 3.

U.S. Energy Information Administration (2015). *U.S. net imports of crude oil and petroleum products.* Retrieved from: https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MTTNTUS2&f=A

United States Census Bureau (2016). *Quickfacts.* Retrieved from: https://www.census.gov/quickfacts

Weber, B. A., Geigle, J., & Barkdull, C. (2014). Rural North Dakota's Oil Boom and Its Impact on Social Services. *Social Work*, *59*(1), 62-72.

Wielgosz, R., Brown, T., & Lategola, A. (2000). *Rural boomtowns: The relationship between economic development and affordable housing.* Housing Assistance Council: US Department of Housing and Urban Development.

Wilkinson, K. P. (1984). Rurality and patterns of social disruption. *Rural Sociology*, *49*(1), 23-36.

Wilkinson, K. P., Thompson, J. G., Reynolds, R. R., & Ostresh, L. M. (1982). Local social disruption and western energy development: A critical review. *Sociological Perspectives*, *25*(3), 275-296.

Willits, F. K., Luloff, A. E., & Theodori, G. L. (2013). Changes in residents' views of natural gas drilling in the Pennsylvania Marcellus Shale, 2009-2012. *Journal of Rural Social Sciences*, *28*(3), 60.

Wolla, S. A. (2015, May). Falling oil prices create winners and losers. *Page One Economics*: Federal Reserve Bank of St. Louis.

Yin, R. (2011). *Applications of case study research (3rd ed.).* Thousand Oaks: SAGE Publications.