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Black Gold and the Dark Underside of its Development on Human Service Delivery

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Abstract. This paper examines perceptions of human service workers regarding their employment experiences and adaptations in oil-impacted rural communities in the Upper Missouri Valley of North Dakota. This study is part of larger pilot project designed to better inform health and human service professionals and elected officials about the nature of human service delivery systems in boomtowns. Qualitative methodologies were employed to analyze information gathered by interviews conducted with 40 human service workers. Both individual interviews and focus groups were conducted. Study findings indicate that the impact of oil on the human service network is complicated. Human service workers in the study were burdened with new and more complex challenges than before the boom, and had fewer resources to address these additional challenges. Their burden was eloquently summarized by one worker who stated, “While somebody else benefits, we carry the burden of oil boom repercussions.” Smaller scale local strategies appear to creatively meet many needs, and show signs of worker resilience in strategy adaptation.

Keywords: Boomtowns; oil booms, human service workers, human service sector burdens, human service sector adaptation, rural social work

During the past few years, North Dakota has experienced unprecedented growth and expansion due to oil development in the Bakken region (Bangsund & Hodur, 2013). Energy experts celebrate the increase in oil production in the United States that currently exceeds consumption (Koch, 2013) for the first time. This upward trend contributes significantly to the U.S. economy. The two largest oil-producing states, Texas and North Dakota, were responsible for 18% of the U.S. economic growth between 2009 and 2013. In fact, North Dakota experienced a 23% increase in employment since 2007, followed by Texas with a 6.6% increase in employment (Prah, 2013). Noteworthy is that while the United States economy plummeted with the crash of the housing market, the oil industry created an economic bubble in oil rich states and/or created an easier upward post-recession transition in others. Yet, these significant economic and industrial contributions have a human cost resulting in many viewing oil production as both a blessing and a curse (Holywell, 2011). The oil boom is viewed as a blessing in terms of providing needed revenue to state government and an expansion of the job market, while it is a curse in terms of the stress on existing infrastructure and the increased demand for support services in rural communities where oil extraction projects have typically taken place (Dooley & Ruzicka, 2013; England, & Albrecht, 1984).

Since the Industrial Revolution and consequent advances in capitalism, social workers have been impelled to be the first responders in addressing the human service needs created by the human victory over the environment. Consequently, issues of this nature have high relevance

to the field of social work because, while some influences like economic growth are positive, boom and bust cycles can lead to major social problems in these communities (Luthra, 2006). In the past, the nature of oil production, historical trends, and the positive and negative social and economic impacts were widely documented in the local and national media and by academics (as cited in Heitkamp & Jayasundara, 2012). Yet the views and perspectives of human service providers in these oil-impacted communities have been unreported. Especially lacking in attention in the academic community is their perception of the needs and solutions as they apply to rural social work.

As mentioned, large-scale oil extraction projects have historically taken place in rural communities (Brown, 2010; Jacquet, 2009). While there is no clear consensus on what constitutes a rural community, some common elements exist (Ginsberg, 2005). They generally include areas with low population densities that are geographically isolated. Resources and opportunities are generally scarcer, contributing to higher poverty rates, with a greater proportion of jobs requiring intensive physical labor and a higher reliance on informal networks. Rural communities also tend to be made up of more homogenous populations that have a strong emphasis on traditional values and community, often leading to enhanced friendliness and trust among community members, but suspicion towards outsiders and a reluctance to change (Ambrosino, Heffernan, Shuttlesworth, & Ambrosino, 2012; Brown, 2010; Daley, 2010; Flora & Flora, 2013; Riebschleger, 2007). Yet, due to high demand for skilled labor in the initial phase of oil extraction projects, there is a high level of in-migration of people from outside to meet these needs, impacting the rural nature of these communities and how services are conducted. Human service agencies, whose mission is to alleviate social problems, grapple with the magnitude of the changes and problems faced in their rural communities due to oil (Bohnenkamp et al., 2011).

Rural human services providers have traditionally encountered challenges in terms of service delivery (Ginsberg, 2005; Mackie, 2012). Numerous variables have been identified as reasons for these challenges including transportation, funding, limited support services, and the lack of affordable housing (Rural Policy Research Institute, 2010). Issues of accessibility, availability, and acceptability present serious challenges to mental health care and other related services (Health Resources and Services Administration, 2005; Smith, 2003). The issue of access to mental health services becomes paramount when coping with social transitions associated with oil development, including responding to crisis situations that arise due to oil extractions (Locke & Werner, 2013). These services are needed both by those who have migrated, often times a transient group in search of jobs and opportunities, as well as those who have been longtime residents of these boomtown communities. Longtime residents are often overlooked. Yet, coping with the sense of loss from community change can create issues that need to be addressed.

Additionally, affordable housing is an ongoing challenge, and agencies to address these challenges are limited. In fact, housing is a key unmet need in rural boomtowns (Ennis, Finlayson & Speering, 2013). This study, then, is an attempt to remedy this paucity in the literature by looking at the human service workers' employment experiences as they apply to rural social work and strategies they use to overcome their difficulties in affected areas of one oil rich state. This study was conducted in the region that is currently impacted by the oil boom in rural western North Dakota, called the Bakken, in the Upper Missouri Valley. This paper begins with a literature discussion of the nature and impact oil booms in general, followed by a more

focused literature discussion on the Bakken in North Dakota. Later, the methods are presented with a discussion of the results and implications for rural social work.

Literature Review

Nature and Impact of Oil Booms

Rural communities experiencing oil development are typically referred to as boomtowns due to a cyclic pattern of economic growth and failure they experience related to oil production (Investor, n.d.; Jacquet, 2009). Research on boomtowns identifies a three-phase cycle of the oil development lifespan, beginning with a relatively short construction phase that includes drilling of wells, fracturing, construction of pipelines, and other beginning oil related developments. This phase requires an abrupt necessity for employment; and as a result, a need for change in the community infrastructure. This is followed by the production phase which is longer in duration than the construction phase, but demands a much smaller labor force. Lastly, the decommissioning phase leads to closing of the wells and often-unused housing projects (Brown, 2010; Gramling & Brabant, 1986; Jacquet, 2009). This results in the loss of the need for infrastructure and the labor created in the previous phases.

The resultant socioeconomic impacts on boomtown communities are enormous. This is due largely to the initial labor demands caused by the newfound oil projects and the inability of rural communities to supply this labor demand. A majority of oil work requires a specialized skill set that community members often lack. This entices outsiders to migrate in and take advantage of new job opportunities to fill this void. The increase in transient populations creates dramatic community change. Finally, this in-migration is followed by an out-migration of these same labor forces when the projects go into production and when the final dismantling of the projects occur (Brown, 2010; Carrington & Perieura, 2011; Frick, 2010; Jacquet, 2009).

This influx of transient individuals causes rapid population growth (Bohnenkamp, Finken, McCallum, Putz, & Goreham, 2011). The harmful effects of rapid population growth are well documented (Carrington & Perieura, 2011; Jacquet, 2009; Lee & Thomas, 2010; Rudell, 2011). Typically, local communities do not have the infrastructure capacities to accommodate this growth and are unable to mitigate the social problems that accompany these new workers and their families (Jacquet, 2009; Wirtz, 2013). Thus, significant increases in criminal activity, mental health issues, and a lowered quality of life are typically experienced in these boomtowns. These sharp increases easily overwhelm the modestly sized support systems that were designed to help alleviate these social problems for a much smaller population (Carrington & Perieura, 2011; England & Albrecht, 1984; Freudenburg, 1991; Jacquet, 2009). The economic impact in the local community is mixed because some residents, businesses and/or communities, benefit financially more than others. Community residents not directly working for the energy industry must cope with inflationary pressures, while not seeing concurrent increases in income (Jacquet, 2009). Gilmore calls this the *problem triangle* (as cited in Jacquet, 2009) where the inadequate goods and services lead to a decrease in quality of life and a subsequent drop in workforce productivity. An inadequate workforce contributes to a reduction in industrial activity such that the level of public or private investment in the community does not meet the current need for services.

Additionally, local residents are likely to experience feelings of uncertainty and an increase in conflicts or community divisions (Bohnenkamp et al., 2011; Jacquet, 2009). Rural communities located within the oil production area must cope with the loss of their former community identity due to changing relationships. Complicating this issue is that these communities have multigenerational members who value the history and culture of their communities, and miss “what was a farm community...” (Bohnenkamp et al., 2011, p. 7).

The term *gemeinschaft* describes the sociocultural ecologies of rural communities (Greenfield, 2009). Strong interpersonal relationships, interdependence, and social institutions and services that are informal and responsive to local needs, characterize these communities. As stated, rural communities have tended to be homogenous in demographic and socio-economic characteristics (Greenfield, 2009). Boomtown expansion often erodes these relationships, undermining mutually dependent behaviors that allow for the care and support of one another. Changes associated with rapid growth present stressful challenges and a sense of social and community disorganization as these communities transition and incorporate more diverse populations and tackle more complex human needs (Luthra, 2006). The new diversity created by the newcomers can also bring about culture clashes between the new and old residents; as mentioned, the latter is accustomed to more homogenous populations and are used to knowing their community members (Heitkamp & Jayasundara, 2012).

Modern sociological theory, whether social capital, social disorganization, or a civic community perspective, all postulate that rapid social change/population growth can erode community well-being. Additionally, change is most disruptive when it is abrupt (Kassover & McKeown, 1981; Lee & Thomas, 2010). To Durkheim (1893), rapid social change is accompanied by anomie, or an erosion of social norms in a community (Brown, 2010; Freudenburg, 1984; Lee & Thomas, 2010).

Gilmore (1976) outlines four stages of attitude change that boomtown communities experience when coping with rapid population growth and industrialization. These were later modified by Freudenburg (1981). These stages are:

1. The early enthusiasm stage where the focus is on the positive economic impacts of job growth, with the potential negative impacts being either unknown or dismissed;
2. The uncertainty stage where change occurs due to new workers arriving in significant numbers. During this stage there is a realization of some negative impacts beginning with the dawning expectation that concerns about development will likely grow. Divisions within the community regarding whether growth is positive or negative begin to develop;
3. The near panic stage emerges, as the oil industry and associated impacts grow much faster than expected, and the character of the community changes dramatically. In this stage, government services become overwhelmed and service quality declines, as revenue for new resources is inadequate. Officials are not equipped to make the necessary policy decisions, while long term community residents become disgruntled with the change in their historic way of life; and
4. The adaptation stage, as the fundamental issues are finally identified and strategies to mitigate them are developed. Residents begin to accept the reality of their situation and may feel a sense of progress (as cited in Jacquet, 2009).

The Bakken Oil Development in North Dakota

The Bakken is a 350 million year old shale rock formation that stretches across western North Dakota, Northeast Montana, and the Saskatchewan Province in Canada (Hargreaves, 2011; Langton, 2008; MATIC & NDSLIC, 2012). Oil was first discovered in the Bakken in 1953 by geologist J.W. Nordquist, and named after Henry Bakken, the owner of the Montana farm where it was first drilled (Langton, 2008). The current oil boom is the third wave of oil development that the Bakken Valley has experienced within the past 40 years (Bohnenkamp et al., 2011). The current oil expansion began during the early 2000's (Dobb, 2013; MATIC & NDSLIC, 2012) and has accelerated since 2008. It is anticipated to last for at least the next two decades (Haggerty, 2012). The current area of production is centered in western North Dakota, primarily around the Williston basin.

It is estimated that 3.5 billion barrels of oil will be extracted from the Bakken formation (Dobb, 2013; MATIC & NDSLIC, 2012). The most recent Department of Mineral Resources press release states that North Dakota reached a record high in oil production by producing 941,637 barrels a day (Helms, 2013). Today it has become one of the largest suppliers of oil in the United States, second only to Texas (Dobb, 2013).

The current wave of oil activity in the Bakken is in the production phase of boomtown development. This phase is expected to last at least several more years. The reason for this extended period of expansion, and record high oil production, is due to the development of technology. This technology, called fracking or horizontal drilling, allows for enhanced penetration of the ground to extract oil reserves. Until recently, the extraction of oil occurred through vertical drilling only; and vertical extraction limited the amount of oil that could be produced from an oil well (Haggerty, 2012). Horizontal drilling, however, allows increased access to oil that could not be extracted in the past.

At a time when the rest of the U.S. economy suffered from economic recession, North Dakota continued to contribute significantly to the nation's gross national product, with a taxpayer surplus of \$16,100 in 2012 (North Dakota State Data Labs, 2013). North Dakota had the lowest unemployment rates at 3.1% in 2012 and the highest increase in employment (North Dakota State Data Labs, 2013; Prah, 2013).

Along with economic growth, this period of oil production has created a protracted period of population growth. During the past few years, there has been an estimated 17% increase in the population around the Williston Basin due to expansion of the oil industry (MATIC & NDSLIC, 2012). In fact, Williams County was ranked among the top 5 fastest growing counties in the country in 2012, and Williston was the fastest growing city (with a population between 10,000 and 49,999) in the U.S. with a 9.3 increase (U.S. Census Bureau, 2013). This put North Dakota at the highest population growth by percentage in the nation with a 2.7 increase (U.S. Census Bureau, 2012), and North Dakota population estimates at the end of 2013 reached 723,393 (U.S. Census Bureau, 2014). They conclude that the oil boom was driving this growth (US Census Bureau, 2013).

This growth in population, however, has caused significant social upheaval in the impacted areas as they adjust to these new economic conditions. This population growth has

strained the current housing market and workforce availability and continues to stress the current infrastructure and health and human services delivery systems. These problems have received increased attention through a series of news reports locally and nationally (Taber, 2013). The media has obviously been crucial in providing information and keeping community members informed of developments (Dispensa & Brulle, 2003), particularly during the period when the Bakken communities are in transition. However, information is not currently being collected or analyzed scientifically or systematically, and some question the way the media presents problems (e.g., Willard, 2011).

Limited empirical studies have examined the human service response in the Bakken or any boomtown. However, three notable published studies examined the criminal justice response to crime (Archbold, 2013; Dooley & Ruzicka, 2013; MATIC & NDSLIC, 2012). Dooley and Ruzicka (2013) examined the perceptions and experiences of law enforcement officers regarding domestic violence and sexual abuse. They found that with an increase in incidents of crime, additional training needs exist. The majority of police officers knew of available services and coordinated with other local service agencies; but the greatest barrier to accessing training is the lack of time to attend. A joint study by MATIC & NDSLIC (2012) on oil impact and law enforcement response is also extremely significant. This study found:

“Increases in calls for service, arrests, index crimes, fatal and nonfatal motor vehicle crashes, and sexual offenders, as well as significant turnover and recruitment issues have exacerbated the challenges experienced by law enforcement agencies. Law enforcement officials attribute much of the turnover and recruitment difficulties to employees seeking employment outside of law enforcement, low salary, and lack of available housing. The majority of law enforcement agencies reported a need for additional sworn and non-sworn positions within the next year and indicated a need for additional protective equipment and training” (MATIC & NDSLIC, 2012, p. 2).

They concluded by predicting that the problems would continue. The latest released study by Archbold (2013) also revealed increases in law enforcement calls that are more stressful in nature, with the majority of the workers feeling that the nature of their work has changed due to the oil impact. In addition to these criminal justice response studies, a small number of studies have discussed the medical response to the oil boom. One city found that the ratio of medical staff, physicians and other medical personnel to the city’s population decreased; yet, at the same time, the numbers of patients treated increased (Sauve, 2007). A survey conducted with health service personnel in North Dakota identified a shortage of first responders with a primary concern being an increase in social problems related to the disproportionate number of single men (Graner & Pederson, 2011).

A final notable study (Bohnenkamp et al., 2011) examined the community extension and non-extension workers’ perspectives on their community concerns in the oil booms and their solutions. This study found that workers struggled with a variety of concerns because of the poor quality of living conditions, limited available housing, and the increased cost of housing. They also noted problems with hiring personnel, which resulted in difficulties for service organization staff who were over-extended. Also noteworthy were the increase in traffic, more demands on educational establishments as population increases, and the increase in crime. The description in

the literature relative to social and community disorganization resulting from oil expansion underscores the need for further study of the various challenges that are emerging from this oil expansion, especially those issues related to the human service sector. It is important to study these issues in more depth than has been done previously.

Method

This work is part of a larger exploratory study focused upon the human service needs of rural communities in transition in western North Dakota as the result of the oil expansion. The study attempts to understand a range of changes occurring in these communities and the human resource needs that exist because of these changes. The larger study was based on a critical theory approach.

A critical theory approach to fieldwork advances the research beyond studying society to using findings to bring about social change and raise consciousness (Patton, 2002). A variety of research methods may be employed if the findings help bring about social change for oppressed communities (Kulwicksi & Miller, 1999). This paper focused on the study of human service worker perceptions and their proposed solutions. This qualitative study included health and human service workers employed in the Upper Missouri Valley of North Dakota. The Upper Missouri Valley was chosen because it lies in the heart of the oil rich Bakken, where the majority of western North Dakota oil counties are clustered, including the county most impacted by oil development, Williams County.

This study utilized purposive sampling as its primary method. Agency personnel who served as study participants were identified through the North Dakota Department of Human Services Directory. Administrators and workers from county social service agencies, healthcare providers, and non-profit agencies such as domestic violence centers, child care centers, foster care agencies, long-term care facilities, youth group homes, aging and disability centers, and clergy participated in the study. A few participants were also recruited using a snowball method where participants themselves referred the researchers to additional participants. All study participants were over the age of 18 and served in a leadership position in their community; and all served in the human service sector, and served the Upper Missouri Valley area of North Dakota. They all held supervisory/leadership positions such as director, executive director, and/or program director. All but 10 were female, and all were Caucasian. Their years of service ranged from 6 months to 40 years. For about 70% of participants, this was the first oil boom during which they served in a supervisory capacity.

The study involved a total of 40 human service workers. These researchers conducted both individual telephone interviews and three focus groups. Both are widely used qualitative data gathering techniques (Rubin & Babbie, 2011; Sommer & Sommer, 1997). The study was conducted in two phases. The first phase involved telephone interviews. This was followed by focus group interviews, which constituted the second phase. Focus groups included some participants involved in the first study phase, along with other directors and individuals who were approached to participate through the snowball sampling strategy. Both phases utilized a semi-structured interview format which provided participants flexibility to share salient experiences and perspectives. Further, this allowed for exploration of consistent and unique topics (Patton, 2002). It also insured interview consistency and probing when needed, and the

pursuit of new topics without a complete deviation. All participants completed the necessary consent forms prior to the interviews as required by the Institutional Review Board. No remuneration was given for participation.

Telephone interviews were not tape-recorded to ensure a greater degree of confidentiality. The focus groups were tape-recorded with permission of the participants. A small number of participants were re-contacted for follow-up calls to explore gaps in the information and to refine emergent themes. In addition to tape recording the focus groups, extensive notes were taken with each interview transcribed as verbatim as possible, especially with telephone interviews. This was accomplished to help ensure the validity of information shared. Two researchers participated in the interviews and note-taking.

Data were analyzed using coding techniques consistent with content analysis that systematically identifies and categorizes themes to develop significant themes in qualitative analysis (Hsieh & Shannon, 2005; Patton, 2002). There were two researchers who analyzed the data in order to increase reliability.

Results

Participants identified a myriad of human service-related problems they frequently address as a result of their employment in a rural oil-impacted area. As one worker eloquently stated, “while somebody else benefits, we carry the burden of oil boom repercussions.” When questioned about aspects they liked about the oil boom, most participants indicated “nothing.” Despite their burden, workers also discussed many methods they employed to meet local-level needs.

Changes in the Nature of the Service Delivery

Human service workers described a host of changes that impacted how they deliver post oil boom services. These included an increase in caseloads, more complexity in the problems presented by their clients, and changes in the nature and type of services requested. All human service workers stated their workload has increased tremendously. The perception is best reflected in the statement by a worker who said her “caseload has skyrocketed.” Others talked about the number of new service requests that were different, more intense in nature, and confounded by several reporting issues. They eloquently described the totality of the problem as not being reflected by reporting numbers alone. In fact, several respondents stated that data released by government officials did not reflect the realities of their caseloads. An agency director described the need for their agency to report data, separate from state reporting structures, because official sources were not reflective of service needs and were updated infrequently.

The impact of multi-layered changes in services, combined with increased caseloads, does not appear to be adequately presented in the numbers reported by official agencies (Ruddell, Jayasundara, Mayzer, & Heitkamp, in press). As participants stated, the number of clients served alone did not adequately reflect the changes to their workload, as they did not reveal the increased intensity in the needs in the transient populations they served. The majority of participants agreed that the client problems they address were more severe in nature than in

the past. Clients arrived with a multiplicity of intersecting factors, complicating their situations and service needs. For example, workers noted issues of increased substance abuse and mental health concerns in both local and transient clients. This is articulated by one worker's comment: "Everything is more complicated with client problems... so we see a lot of addiction. We are seeing a lot more mental illness coming through; just harder clients to work with..."

In addition to the severity of problems, workers are also faced with addressing service requests not addressed before. For example one health worker said, "We are seeing different types of medical problems now...the other day a man came with a mosquito bite we have never seen before...it was a type of spider found in Texas..."

Human service workers described client profiles that were different than in the past. This includes serving clients who represent different racial, ethnic and religious backgrounds than their former caseload prior to the oil boom. Workers noted regional differences in clients they served and the inability to identify the "typical client" who is primarily faced with limited access to services in rural communities. As one worker stated, "...we used to get our child protection order from law enforcement and we knew their extended family, and now it is different." Several workers also described the stress the boom is placing on families who are long-term residents of the community, particularly related to increased housing costs. One statement in particular exemplifies this: "We are getting even more reports on our local families I think because of the stress and things that are going on, and they are all living in the same household. We have 2 and 3 families in that household. They have all been clients before, but they move in together because they have to live...so, our clients are not the typical client anymore."

Difficulties in Hiring and Retention

The vast majority of professionals interviewed stated they have experienced a critical staff shortage. Fueling this shortage was the difficulty in staff recruiting and retention. This was reflected in the following statement: "We haven't been able to hire staff. We had a staff person that left. We haven't been able to hire." So, even when funds are available to hire new employees, or replace employees who leave the agency, they are unable to recruit. Another comment by a participant supports this concern: "Agencies often don't have the staff to provide the service, and parenting classes we have been without a parent resource center here; it's been almost 3 years. We have tried to hire a staff person...and it's been one failure after another." With this shortage, existing staff were forced to assume multiple roles. This was an issue because staff members needed to be on-call more often, carry larger caseloads, and endure difficult travel to work. Hence human service administrators constantly feared losing their workers. As one supervisor said: "Every one of us worry about losing our social workers, or any of our staff, because it is literally impossible to replace them. We ask what will it take for me to get you here when making job offers."

A critical issue in staff recruitment and retention was the lack of affordable housing (Bohnenkamp et al., 2011). Workers in the study were unanimous that housing was the number one issue creating problems with hiring staff. Even if they can recruit staff, the cost and lack of housing were prohibitive. Some agencies were renting, even building space, but difficulties remained. Participants described how challenging it was to ask employees to move to an area

with inadequate and unaffordable housing. The only way to respond was to offer higher wages to new and existing employees, and housing access to new hires. Some administrators stated they have been somewhat successful by assuring higher wages and housing access, but challenges remained.

Access to office space was another issue. Oil companies have more resources than human service agencies. As a result, they could offer more in rent. One focus group member underscored this point when stating, "...Where do you put everyone because now we have oil companies in office space that we would consider; and we, as a social service office, can't pay the prices oil fields do. So, what do we do?" The outcome was constant worry for administrators that they would lose rented office space to a higher bidder. This limited confidence in hiring new employees and assuring them adequate workspace. A respondent stated, "I mean, even right down to office space, if we had to hire, we would not have office space."

Adding to a housing shortage were insufficient wages that create problem with recruitment and retention. While salaries have increased, wages were still not enough to compete with oil industry salaries and the increased cost of living as a result of oil development. Competition for quality employees was evident in respondent comments. As one worker stated: "...and a lot of our problems are the same as at the hospital...it is recruitment and retention. It is so difficult...trying to have competitive wages is absolutely impossible. It's not only the oil fields that are paying higher wages. It's your convenience stores, paying \$15-17 an hour..." Yet, an additional problem was voiced by another worker: "One of the things that I don't think the system really understands about local social services is that we're the...welfare end of it. That is what is increasing; and, yet when they give a \$500 per month increase on top of their wages in a state agency we can't compete at other government levels here."

Complicating the issues of inadequate wages was that some employees are benefiting from oil revenue, so they no longer need to work or can now work part-time. As one worker stated, "...I have a lot of staff, whose spouses are making big money, and they don't need to work full-time anymore. They are working part-time. Most of my therapy staff is working part-time."

Some respondents described the difficulty in traveling to work due to a dramatic increase in traffic accidents that caused them to worry about themselves and staff. This fear was due to an increase in the number of vehicles, especially semi-trailer trucks driven by drivers participants felt were not sufficiently trained in driving big trucks in general, nor sufficiently experienced to maneuver in the icy North Dakota roads in winter. They were also concerned about potential substance abuse among drivers. Fearful of accidents, driving to work from a rural or farm area was even more stressful. "It is taking employees over twice the time to arrive at work." One respondent described the fears her child is having regarding her traveling to work outside their home community. Her child learned about all the traffic accidents in his elementary school. This concern was also real for many other workers. For example, a human service worker recently died in a car accident while traveling to a professional meeting. In 2012, a semi-truck crashed into a school lunchroom, injuring students and killing one person (Donovan, 2012). The issue of unsafe traffic has compromised respondents' ability to conduct work related tasks such as home visits.

Lack of Training to Meet Changing Needs

Workers identified the need for additional staff training to reflect changing client needs. With caseload work being more complex and safety issues surrounding increased family violence, training and supports were critical. However, attending training was difficult because there was little time. Caseloads were so high that agency release time for training was difficult to secure. The problem was exacerbated with part-time staff because training cuts more intensively into their direct service hours, and costs the agency money and time. As one worker explained, “We need more money, so I could hire more staff, and get more training. I was just talking with my residential supervisor today. And, she said she just came back from the shelter meeting in Bismarck. I said, ‘How did that go? And, she said, ‘We talked a lot about training the staff to help victims.’” But, the additional funds for training were often not provided, travel to the training is difficult, and time away from direct services was not available.

Services are Insufficient to Address Needs

Several participants stated that current services were not meeting the needs of clients. As one worker stated, “We just don’t have the services to help these people.” Another said, “And I can think of, I mean, we have right now seven high needs kids with mental health trauma. And, I mean that may not seem like a lot but for our rural county, I mean they are all intense...that is how I look at it. We just don’t have the services to help these people...” This statement underscores the unique issues of rural social work practice when policy makers do not understand that even seven high-risk cases can be overwhelming in geographically isolated, weather trodden remote areas, with little access to services.

Even when services were available, they were inadequate to meet client need. A non-profit agency serving primarily domestic violence and sexual assault clients described an increase in client need and insufficient service access. The housing vouchers were cited as an excellent example: “They can’t use the vouchers and find affordable housing to use the vouchers. So, they are turning them back. So, it looks like you don’t need any vouchers. Well, no the rents are so high the vouchers don’t help at all.” In addition to physical resources, the previously discussed lack of human resources also causes delays in effectively serving clients. For example, one worker said, “But, we end up with our kids involved in non-caretaker sexual abuse cases and have to call in law enforcement or serious charges...where we have a death or something like that. And, law enforcement gets involved. Our cases go on forever because law enforcement can’t finish them up because they are so busy...even though they also try their hardest.”

Yet another burden of service delivery was created by the rural nature of the communities where they might not have services within their catchment areas, and workers had to refer clients to other counties. This created additional service delivery problems, however, due to the lack of transportation for clients because of the time needed to travel to service locations. One interviewee stated, “I get their point when they say okay now I am supposed to go to low intensity outpatient. I live in a rural area, and I am supposed to get to Williston three times a week. I have no vehicle, I have no money. I mean, we can get gas cards and then they’re like well I think that you need to provide staff to bring me.”

In attempting to provide services, workers were further burdened with added roles in already short-staffed work environments. Of concern was the increased time and cost to transport clients to service providers. One worker said, "I would need to have a full tank cuz it's three hours of drive time just to get you to the next county and then that is a 2-3 hour group. I mean that's a full day." Yet another stated, "And, if you have their kids in care and the parents have no driver's license or transportation, you are transporting them both for visitations. It's like you feel like you are a taxi driver, and then they wonder why you can't get your paperwork done. The amount of windshield time is ridiculous." Another worker described the lack of human resources that prevent some agencies from providing these same services: "Well, just not only just that, it's just that we just don't have the staff. Like I said, we've reduced the amount of individuals we serve. So, in two of the homes, we can get five with one staff at a time. But, at Stanley, we need two staff at a time because of the severity of the disabilities."

Economic Realities of Resource Allocations

Some workers felt that even though the demand for services increased, the response was not adequate due to the politics and economics of resource allocation and service delivery. When services were most needed, they have had to cut back on those very services. One worker said, "I think the most frustrating is you really can't help people...you can always pull something out or figure something out or make a plan, and, there are times when you are in these cases and you are like I literally have no options for you to make...and, then you send them down the road, and that is hard." Unfortunately, it appears that clients who needed the most services were the very people not served because services and their access did not exist in the Bakken. As one worker said, "The hardest thing is that...in my county, it's...the people who struggle the most, that are cut out. They can't afford housing; they are on restricted incomes...it's that aging population and the people who are the waitresses...."

Workers described how the political nature and economic climate of the region work against the clients they served. Respondents described decisions about service resources and access that were beyond their control. Frequent and clear frustration was expressed about the lack of help from governmental officials in solving the complex needs of people with fewer resources in the Bakken. As one worker explained, "The fact is this. When you've got an area of the state producing the amount of money we are producing out here, the state needs to reinvest in that. If this were a private business, they wouldn't just be milking the funds, and not re-investing in it. And, I don't see them. They talk a lot about what they are doing; but, I don't see them really making a re-investment in it."

Yet, other workers who have experienced previous booms and busts were aware of the added complications created by investing in their municipalities to enhance services, when the threat of the oil bust is looming. One participant underscored concerns about delays in planning (and zoning) as a result of the past boom and bust cycles in the community. This participant stated the perception as "oh yeah, you guys [oil companies] will be gone in a couple of years. Because that's the way it went in the past." Another worker in response to this worker said, "Yeah, we got burned the last oil boom. So, people don't forget that. How you invest when they can all go away in a minute. But, they say this is here for few more years."

However, at the local level these larger factors created complications for agencies trying to provide services to meet new needs such as mental health assistance. A respondent stated: “The fact that the hospital closed their psych unit, addiction and mental health unit, right at the time it was needed the most...they wanted that space to put the cancer treatment center...it’s just about the bottom-line.” Another worker described losing intensive in-home services for youth and families experiencing concerns by stating it was a funding decision beyond their control: “Funding. They just took it away from us. We were the only region in the state that lost it.” Also cited as an issue were concerns about tight regulations preventing creative problem solving when trying to secure volunteer help or foster parents. There was concern among long-term community residents that those who come to work in the Bakken often do not have the same commitment to community.

It is important to note that respondents reportedly did not have time to attend meetings where they could adequately explain their needs. They may have had the monetary resources they needed; however, they still could not meet their local needs. For example, one worker said:

"One of the problems that I have seen is with emergency services. Is through these grants of the oil impact fund, the local fire department and emergency services can get all the money they want for equipment. The problem isn't equipment. The problem is staff. The smaller towns...for example...used to be places that [received] calls 3 times a month. Now, [they are] called out 2 to 3 times a day. They are all voluntary staff. These people all have other jobs...a developer was proposing a great development, and we were meeting with...city people and talking about it. I said to the head of emergency and fire...this is probably a point where you can no longer run this as a voluntary service. He said, where would we get people?"

This quote underscores concerns about the importance of voluntarism, yet it is becoming impractical on many levels.

Creative Solutions

When support did not coming in the form they needed from higher authorities, human service workers appeared to network and think of creative ways to solve the problem. The same human worker above went on to say, “I said one of the things we could do is require these developers to contribute to emergency services, because they said [they] can’t create a new fire district...I said they don’t need to, but they could be required to contribute enough to fund staff, at least a couple staff. If they are going to put 300 people or 2000 people there, they need to be assessed for that... If you required it, I think you could get them, if you paid decent salaries....” Similarly, many workers felt it was left for them to advocate for their community and agency needs. They felt compelled to take a very proactive approach in their advocacy defining their needs and asking for solutions, whether it was asking for salaries, advocating for housing, or more client services. All participant workers agreed that staying connected with other human service agencies and members was crucial for surviving the oil boom’s impact. They knew what services were available in the community and who provided them; and they knew many of the other workers personally. This increased their coordination and prevented effort duplication every time they needed services that were unavailable. They also felt that because of the oil

boom, networking between workers was better. As one human service worker put it, “I think we need to band together to get through it, because if you get isolated you are not going to make it.” This sentiment was echoed by all of the workers. Similarly, workers appeared to support each other through the oil boom. They stated that it was important to rely on each other to provide needed services, but were now in short supply due to oil impact activity. Consequently, if one city had an overflow of clients, the next city would help out by providing services for overflow clients. They were able to share workers and services. As one worker stated, “I think for us what I have seen is that we don’t have an outreach worker that comes to the county, so we now have had to lean on X county. ...They have been great to help us, through their main branch.”

Many talked about having alliances to support each other. For example, county social service directors started a regional group to address their needs, which were very different from the needs of other county directors statewide. They met every month to discuss their county issues and how to best serve their clients. Non-profit workers stated that they had private alliances with other non-profit agencies and churches, where the meetings in many ways serve as support groups. One said that they learned from each other, for example, about exploring different fundraising strategies. The recent development of a mental health coalition to effectively address mental health needs in the area is another example. Thus, networking, coordinating and supporting each other through the oil boom were seen as very important strategies. These meetings also served as a venue to brainstorm, strategize, and make action plans. This constant solution-seeking happened within agencies, through network sessions, or even at regional meetings. Sharing each other’s success stories was a creative way to find solutions.

In addition to networking and mutual support, some workers started reaching out to potential donors; agencies with which they had to interact and their constituents were very important. The majority of the workers who have received funding from oil companies advised their other focus group members that the best way to receive money from oil companies and other potential donors was to make personal contacts with them. Others, who have not received money from oil companies, also aired this sentiment as they said they have not aggressively attempted to make personal contact. Instead they prepared grants or requested money as part of their fundraising efforts. One worker shared that he knew individuals who have benefited from oil, and through personal efforts, came to sympathize with the needs of members of the community and donated money. “I got \$15,000 from an individual. It wasn’t an oil company, but just a company in town that decided they wanted to do something good for people and gave me the money, and said use it for kids. So, I use it at my discretion, and run it through my board, and say this is what I used it for.”

For many study participants, this was their first time experiencing an oil-boom professionally as they were new to working in oil-impacted environments. However, even workers who have been through past oil-boom and bust cycles found this boom different, more significant. Thus, problems they faced felt new, and solutions required creative thinking, especially given the limited resources they faced. As one worker stated, “we will get creative. We try to figure out an option...but we come up with creative ways [to] address our problems.” This meant improvising at many levels. Many of the workers’ discussions reflected that they have lowered their standards of living. For example, living in a trailer or getting a room for a staff member have become accepted living arrangements. Additionally, study respondents, the

majority of whom who were directors or in other supervisory capacities, felt they have had to take additional roles beyond their primary human service assignment. For example, as housing was a major issue for hiring and retaining staff, some attempted to provide housing through their agency. Thus, the employer became their landlord; and workers took on multiple roles beyond their designated duties.

Discussion

Rural human service workers impacted by oil booms have to be innovative in order to compensate for limited resources. Working in rural communities in general requires flexibility, imagination, and creativity to improvise and make up for the service deficits and effectively serve clients. Typically, rural communities have fewer professional workers; therefore, human service workers have to play multiple roles, coordinating multiple aspects of social services (Farley, Smith, & Boyle, 2005). As this study reveals, these already overextended rural human service worker capacities, conditions, and resources are even further spread thin due to the boomtown effects and the complexity of the problems they confront. Significant numbers of human service workers in the study stated that they see no benefits with oil; and, one worker very eloquently stated, “while somebody else benefits, we carry the burden of oil boom repercussions.” Due to structural changes to communities during booms, these towns go from being rural to having urban cluster conditions (U.S. Census Bureau, 2014) at least during the boom. However, as is reflected in the current study, human service sector resources didn’t appear to expand at the same pace because of inadequate resource structures and supports.

Consequently, despite North Dakota's economic security, not everybody benefitted equally from oil production (Jacquet, 2009). In fact, human service workers, who were directly caught in the midst of oil boom, appear to benefit least. Their burdens appeared to have significantly increased to the extent that one worker described oil booms as a “human tornado.” The consequence of not addressing these serious problems has been an outmigration of the population who has served as part of the volunteer infrastructure of the community. So, former volunteer firefighters, foster parents, volunteer aids and “church ladies” have moved to other communities. The impact of development and the “gentrification” occurring within these rural communities allows new residents to replace long-term community members who do not have the same level of community commitment. Additionally, the changing societal mores surrounding acceptable social behavior has been stressful for the community and compounds the level of engagement of existing volunteer respondents.

Exacerbating this issue was the fact that North Dakota ranks lowest among oil states for providing funds directly to its oil impacted counties. For example, North Dakota falls far behind states such as Colorado in direct funds (Haggerty, 2012). At the moment, human service workers appeared to play the role of *Atlas*, carrying the burden of the darker side of the oil booms but with no perceivable benefits. With resources lacking, workers improvised by finding creative solutions. It was unclear how sustainable their efforts can be in the long term as the current boom is predicted to last many more years (Haggerty, 2012; MATIC & NDSLIC, 2012). It seems people were learning on the job, making isolated efforts (Haggerty, 2012). However, more sustainable solutions may be needed in addition to what is already occurring. Policies and funding structures could be put in place to address these concerns through visionary leadership. Noteworthy is that local stakeholders were gathering to respond. For example, a coalition group

in Williston is looking at best practices in after school care to assure youth safety, and another group is addressing serious concerns about depression and suicide in a coordinated manner. Findings from the study were presented to these groups.

Others studying boomtowns have also cautioned that without concerted efforts by all parties involved, further negative consequences may result. Joint partnerships between human service workers, residents, industry leaders and local and state level governments must be in place to plan better and mitigate the unseen effects of boomtowns. In addition to creative bottom-up solutions by human service workers, open discussions, advocacy, and negotiations must take place between all involved stakeholders in order to better manage, mitigate and plan their community infrastructures (Carrington & Pereira, 2011).

It is clear that further systematic analyses are needed; however, this exploratory qualitative study of 40 workers is a start. This study was unable to provide perspectives from all human service workers. Additional studies are needed to examine different social issues, particularly at the community level, with policy research. Future studies can benefit from mixed methodologies that show trends and the reasons for these trends. Further studies are also needed to better assess what additional academic curricula and training needs would better prepare social work students to work in rural oil impacted areas. From the current study, it is unclear what protective factors human service workers use in practices associated with oil booms. For instance, what internal and external factors foster resilience in human service workers during times of great stress and uncertainty?

Training opportunities in the Bakken can provide an opportunity for rural social work education programs to train future workers. The human service workers who lived experiences as shared in this study can provide guidance to others who work in similar boomtowns as to how they might intervene at both micro and macro levels. In the end, understanding the problem in detail is a start. Beyond the Bakken Valley, these study findings provide themes of struggles and coping that can be transferable to rural social workers/human service workers in other oil booms and to rural social work in general, as they speak to the human sector burden of rapid change without concomitant infrastructure changes.

References

- Archbold, C. A. (2013). "Policing the patch": An examination of the impact of the oil boom on small town policing and crime in western North Dakota. *Oil Patch Dispatch*. Retrieved from oilpatchdispatch.areavoices.com/2013/
- Auerbach, C. F., & Silverstein, L. B. (2003). *Qualitative data: An introduction to coding and analysis*. New York, NY: New York University Press.
- Bangsund, D. A., & Hodur, N. M. (2013). Petroleum industry's economic contribution to North Dakota in 2011. North Dakota State University. Retrieved from http://www.ndoil.org/image/cache/NDSU_Petroleum_Economic_Contribution_2011.pdf
- Bohnenkamp, S., Finken, A., McCallum, E., Putz, A., & Goreham, G.A. (2011). Concerns of the North Dakota Bakken oil counties: Extension service and other organizations' program

- responses to these concerns. North Dakota State University. Retrieved from <http://www.ag.ndsu.edu/ccv/documents/bakken-oil-concerns>
- Brown, T. (2010). *Social change, social capital, and civic community: A study of the long-term effects of industrial restructuring on a coastal community*. (Unpublished doctoral dissertation). Louisiana State University, Baton Rouge, LA.
- Carrington, K., & Pereira, M. (2011). Social impact of mining survey: Aggregate results for Queensland communities, concept paper. Queensland University of Technology. Retrieved from eprints.qut.edu.au/42056/1/42056.pdf
- Daley, M. R. (2010). A conceptual model for rural social work. *Contemporary Rural Social Work*, 2, 1-7.
- Dispensa, J. M., & Brulle, R. J. (2003). Media's social construction of environmental issues: Focus on global warming—A comparative study. *International Journal of Sociology and Social Policy*, 23, 74-105. doi: 10.1108/01443330310790327
- Dobb, E. (2013, March). The new oil landscape. *National Geographic*. Retrieved from <http://ngm.nationalgeographic.com/2013/03/bakken-shale-oil/dobb-text>
- Donovan, L. (2012, September 19). Students, teacher injured when semi crashes into Watford City school; car driver killed. *Bakken Breakout*. Retrieved from <http://bismarcktribune.com>
- Dooley, L., & Ruzicka, R. (2013). *Law enforcement survey on domestic violence and sexual assault*. Retrieved from Minot State University, Rural Crime and Justice Center. Retrieved from <http://www.minotstateu.edu/rcjc/pdf/LawEnforcementSurveyBrief.pdf>
- England, J. L., & Albrecht, S. L. (1984). Boomtowns and social disruption. *Rural Sociology*, 49, 230-246.
- Ennis, G., Finlayson, M., & Speering, G. (2013). Expecting a boomtown? Exploring potential housing-related impacts of large scale resource developments in Darwin. *Journal of Studies and Research in Human Geography*, 7, 33-42. doi: 10.5719/hgeo.2013.71.33
- Farley, O. W., Smith, L. L., & Boyle, S. W. (2005). *Introduction to social work* (10th ed.). Boston: Allyn & Bacon.
- Flora, C. B., & Flora, J. L. (2013). *Rural communities: Legacy and change* (4th ed.). Boulder, CO: Westview Press.
- Foran, C. (2013, December). North Dakota oil production hits records high. *National Journal*. Retrieved from <http://www.nationaljournal.com/energy/north-dakota-oil-production-hits-record-high-20131213>
- Freudenburg, W. (1981). Women and men in an energy boomtown: Adjustment, alienation, adaptation. *Rural Sociology*, 46, 220-244.

- Freudenburg, W. R. (1984). Boomtown's youth: The differential impacts of rapid community growth on adolescents and adults. *American Sociological Review*, 49, 697-705.
- Frick, B. (2010). *Recycling the oil boom*. (Unpublished doctoral dissertation). North Dakota State University, Fargo, ND.
- Gibson, J. W. (2012, December 3). Shale oil boom in North Dakota is impacting Native Americans especially hard. *Earth Island Journal*. Retrieved from http://www.earthisland.org/journal/index.php/elist/eListRead/shale_oil_boom_in_north_dakota_is_impacting_native_americans_especially_har/
- Gilmore, J. S. (1976). Boom towns may hinder energy resource development: Isolated rural communities cannot handle sudden industrialization and growth without help. *Science*, 191, 535-540.
- Ginsberg, L. H. (Ed.). (2005). *Social work in rural communities* (4th ed.). Alexandria, VA: Council on Social Work Education.
- Graner, B., & Pederson, S. (2011). The North Dakota oil boom: Changing the landscape of a community's health [Abstract]. *Prairie Rose*, 80, 10.
- Greenfield, P. M. (2009). Linking social change and developmental change: Shifting pathways of human development. *Developmental Psychology*, 45, 401-418.
- Haggerty, M. (2012). Benefitting from unconventional oil. *Headwaters Economics*. Retrieved from <http://www.stanford.edu/group/ruralwest/cgi-bin/projects/headwaters/Bakken-Energy-Report-Headwaters-BLC-120424.pdf>
- Hargreaves, S. (2011, March 9). Billions of barrels of untapped U.S. oil. *CNN Money*. Retrieved from http://money.cnn.com/2011/03/04/news/economy/oil_shale_bakken/index.htm
- Health Resources and Services Administration, Office of Rural Health Policy (2005). *Mental Health and Rural America: 1994-2005*. Retrieved from http://ask.hrsa.gov/detail_materials.cfm?ProdID=3899.
- Helms, L. (December 13, 2013). Director's cut. *NDIC Department of Mineral Resources*. Retrieved from <https://www.dmr.nd.gov/oilgas/directorscut/directorscut-2013-12-13.pdf>
- Hsieh, H. F., & Shannon, S. E (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15, 1277-1288.
- Holeywell, R. (2011). North Dakota's oil is a blessing and a curse. *Governing*. Retrieved from <http://www.governing.com/topics/energy-env/north-dakotas-oil-boom-blessing-curse.html>
- Horwath, B., & Dalrymple, A. (2012, September 18). Semi-truck plows into small Christian school after colliding with car. *Bakken Today*. Retrieved from <http://www.bakkentoday.com/event/article/id/34281/>

- Investor (n.d.) Boom and bust cycle. *Investor Words*. Received from http://www.investorwords.com/7022/boom_and_bust_cycle.html
- Jacquet, J. (2009). Energy boomtowns & natural gas: Implications for Marcellus shale local governments & rural communities. *The Northeast Regional Center for Rural Development*. Retrieved from http://energy.wilkes.edu/PDFFiles/Issues/Energy_Boomtowns_and_Natural_Gas.pdf
- Kassover, J., & McKeown, R. L. (1981). Resource development, rural communities and rapid growth: Managing social change in the modern boomtown. *Minerals and the Environment*, 3, 47-54.
- Koch, W. (2013, Nov 13). Big milestone: U.S. producing more oil than it imports. *USA Today*. Retrieved from <http://www.usatoday.com/story/news/nation/2013/11/13/us-oil-production-exceeds-imports/3518245/>
- Kulwicki, A. D., & Miller, J. (1999). Domestic violence in the Arab American population: Transforming environmental conditions through community education. *Issues in Mental Health Nursing*, 20(3), 199-215.
- Langton, J. (2008, June 27). Bakken formation: Will it fuel Canada's oil industry? *CBC News*. Retrieved from <http://www.cbc.ca/news/business/story/2008/05/23/f-langton-bakken.html>
- Lee, M. R., & Thomas, S. A. (2010). Civic community, population change, and violent crime in rural communities. *Journal of Research in Crime and Delinquency*, 47(1), 118-147. doi:10.1177/0022427809348907
- Locke, C. R., & Werner, D. (2013). Stigma of help-seeking behavior following the Deepwater Horizon oil spill. *Contemporary Rural Social Work*, 5, 17-41.
- Luthra, A. D. (2006). *The relationship of crime and oil development in the coastal regions of Louisiana*. (Doctoral dissertation). Retrieved from Louisiana State University, http://etd.lsu.edu/docs/available/etd-06122006-133233/unrestricted/Luthra_dis.pdf
- Mackie, P. F-E. (2012). Social work in a very rural place: A study of practitioners in the Upper Peninsula of Michigan. *Contemporary Rural Social Work*, 4, 63-90.
- Montana All-Threat Intelligence Center (MATIC) & North Dakota State and Local Intelligence Center (NDSLIC) (2012, August 17). *Impact of population growth on law enforcement in the Williston Basin region*. Joint Product: Montana All Threat Intelligence Center & North Dakota State and Local Intelligence Center. Retrieved from <http://www.ag.state.nd.us/reports/JOINTPRODUCTFINAL.pdf>
- North Dakota State Data Lab. (2013). *State data and comparisons*. *North Dakota*. (Data File). Retrieved from http://www.statedatalab.org/state_data_and_comparisons/detail/north-dakota

- Oldham, J. (2012, January 24). North Dakota oil boom brings blight with growth as costs soar. *Bloomberg*. Retrieved from <http://www.bloomberg.com/news/2012-01-25/north-dakota-oil-boom-brings-blight-with-growth-as-costs-soar.html>
- Patton, M. Q. (2002). Two decades of developments in qualitative inquiry: A personal experiential perspective, *Qualitative Social Work* 1(3), 261-283. doi:10.1177/1473325002001003636
- Prah, P. M. (2013, September 4). Five years after crash, states still picking up pieces. *Stateline*. Retrieved from <http://www.pewstates.org/projects/stateline/headlines/five-years-after-crash-states-still-picking-up-pieces-85899502301>
- Riebschleger, J. (2007). Social workers' suggestions for effective rural practice. *Families in Society: The Journal of Contemporary Social Services*, 88(2), 203-213. doi:10.1606/1044-3894.3618
- Ruddell, R. (2011). Boomtown policing: Responding to the dark side of resource development. *Policing*, 5(4), 328-342. doi:10.1093/police/par034
- Ruddell, R., Jayasundara, D. S., Mayzer, R., & Heitkamp, T. (2014). Drilling down: An examination of the boom-crime relationship in resource-based boom communities. *Western Criminology Review*, 15(1), 3-17.
- Rubin, A., & Babbie, E. R. (2011). *Research methods for social work* (7th ed.). Belmont, CA: Thomson Brooks/Cole.
- Rural Policy Research Institute (2010, February). *Rethinking rural human service delivery in challenging times*. Washington, D.C.: Rural Policy Research Institute. Retrieved from http://www.rupri.org/Forms/ServiceIntegration_Feb2010.pdf
- Sauve, M. (2007). Dispatch: Canadian dispatches from medical fronts: Fort McMurray. *Canadian Medical Association Journal*, 177(1), 26. doi:10.1503/cmaj.070516
- Smith, A. J. (2003). Rural mental health counseling: One example of practicing what the research preaches. *Journal of Rural Community Psychology*, 6(2), 1-10.
- Sommer, R., & Sommer, B. B. (1997). *A practical guide to behavioral research: Tools and Techniques*. London: Oxford University Press.
- Taber, J. (2013, June 18). Welcome to prosperity: Violence against women in the Bakken oil fields. *Intercontinental Cry Magazine*. Retrieved from <http://intercontinentalcry.org/welcome-to-prosperity-violence-against-women-in-the-bakken-oil-fields-19682/>
- U.S. Census Bureau. (2012, December 20). North Dakota is nation's fastest-growing state since 2011. *Newsroom*. Retrieved from <https://www.census.gov/newsroom/releases/archives/population/cb12-250.html>

- U.S. Census Bureau. (2013, March 14). Oil and gas boom driving population growth in the Great Plains, census bureau estimates show. *Newsroom*. Retrieved from <http://www.census.gov/newsroom/releases/archives/population/cb13-46.html>
- U.S. Census Bureau. (2014). National totals: Vintage 2013. *Population estimates*. Retrieved from <http://www.census.gov/popest/data/national/totals/2013/index.html>
- Willard, J. (2011). Questionable coverage: Canadian online news media and the representation of the oil sands. *Graduate Major Research Papers and Multimedia Projects*. Paper 11. Retrieved from http://digitalcommons.mcmaster.ca/cmst_grad_research/11
- Wirtz, R. A. (2013). Congratulations on your oil boom...now the real work begins. *Fedgazette*. Retrieved from http://www.minneapolisfed.org/publications_papers/pub_display.cfm?id=5124

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