



Undergraduate Honors Theses

---

2022-03-16

## Psychological Sense of Community in Gateway Communities

Jaimi Mueller

Follow this and additional works at: [https://scholarsarchive.byu.edu/studentpub\\_uht](https://scholarsarchive.byu.edu/studentpub_uht)

---

### BYU ScholarsArchive Citation

Mueller, Jaimi, "Psychological Sense of Community in Gateway Communities" (2022). *Undergraduate Honors Theses*. 229.

[https://scholarsarchive.byu.edu/studentpub\\_uht/229](https://scholarsarchive.byu.edu/studentpub_uht/229)

This Honors Thesis is brought to you for free and open access by BYU ScholarsArchive. It has been accepted for inclusion in Undergraduate Honors Theses by an authorized administrator of BYU ScholarsArchive. For more information, please contact [ellen\\_amatangelo@byu.edu](mailto:ellen_amatangelo@byu.edu).

Honors Thesis

PSYCHOLOGICAL SENSE OF COMMUNITY IN  
GATEWAY COMMUNITIES

by  
Jaimi C.A. Mueller

Submitted to Brigham Young University in partial fulfillment of  
graduation requirements for University Honors

Sociology Department  
Brigham Young University  
April 2022

Honors Coordinator: Michael R. Cope  
Advisor: Michael R. Cope  
Carol Ward  
Scott R. Sanders



## ABSTRACT

### PSYCHOLOGICAL SENSE OF COMMUNITY IN GATEWAY COMMUNITIES

Jaimi C.A. Mueller  
Sociology Department  
Bachelor of Science

This paper will expand on community research by analyzing the changes in psychological sense of community in gateway communities. We will look at the rural communities that border the Bears Ears National Monument as a case study, in order to evaluate the impact that land management changes have on gateway communities. Survey data from three rural communities that surround Bears Ears National Monument are used to test the effects a proposed land management change has on community needs fulfillment, community emotional connection, community influence and community membership. We find that when a regression is run, the proposed changes to the land designation significantly affects people's psychological sense of community. While the literature on gateways communities and psychological sense of community provided a useful framework for the study of rural community's experience, our conclusion indicates a need to consider rural community experience when proposing land management and designation changes to public lands. Specifically, future research should focus on understanding the community effects of creating a national monument.



## ACKNOWLEDGEMENTS

I would like to acknowledge and thank Doctor Michael R. Cope for all of his help and mentoring. The guidance and direction that I received from Michael was invaluable to me. From Michael I learned to be a better student, researcher and person.

I would additionally like to acknowledge Carol Ward and Scott Sanders for their guidance and direction as well.



## TABLE OF CONTENTS

Title .....	i
Abstract .....	ii
Acknowledgments .....	iii
Table of Contents .....	iv
List of Tables .....	v
I. Introduction .....	1
II. Study Setting .....	4
III. Data and Methods .....	9
IV. Results .....	13
V. Discussion .....	17
References .....	19



## LIST OF TABLES

TABLE 1: Descriptive Statistics .....	9
TABLE 2: Change in Shared Emotional Connection .....	13
TABLE 3: Change in Community Influence .....	14
TABLE 4: Change in Membership in Community .....	15
TABLE 5: Change in Integration and Needs Fulfillment .....	16

## I. Introduction

Increasing numbers of people are flocking to outdoor recreation sites like national parks and national monuments (Lackey & Bricker, 2020). With increased numbers of people coming to these sites, there have been considerable calls to protect and conserve these public lands. Additionally, more people visiting these sites increases the amount of people in the small rural communities and the surrounding areas. Communities that border public lands are called gateway communities, and they can experience significant community changes when there are changes made to the public lands. These communities act as an entry point to the recreational or conservation areas.

We offer a case study of one such gateway community. This paper will look at the rural communities that border the Bears Ears National Monument in order to evaluate the impact that land management changes have on gateway communities. We employ the psychological sense of community measures to evaluate the effect of changes on the communities (McMillan & Chavis, 1986). We surveyed three communities and used the response data for two models, one that shows effectively a bivariate regressions and ordinary logistic regressions (OLS) with control variables to assess the four components of the psychological sense of community against the opposition to the proposed changes to the Bears Ears National Monument. We find that the first regressions show that the proposed changes to the land designation significantly affect respondents' psychological sense of community. Individual experience and sense of community in rural and gateway communities are impacted by land management changes to bordering public lands. In this paper we will review the literature on gateway communities and psychological sense of community. We will provide a setting for Bears Ears and the surrounding areas, and then provide results of the statistical analysis of the variables.

### Gateway communities

Gateway communities are small communities that are outside of national parks, wildlife refuges or other public lands. Within the last thirty years, gateway communities have grown up to six times as fast as counties without designated wilderness areas (McMahon 1999). Residents of these gateway communities feel a strong attachment to the landscape and to the communities itself, and can feel helpless and overwhelmed by the large increases in growth (Lackey & Bricker 2020). These communities have a strong socioeconomic relationship to the public protected lands they border. Tourism in 2019 accounted for 10.3% of the global gross domestic product (Lackey & Bricker 2020). The increased population flow due to tourism can create sources of income for gateway communities, but it can also amplify income inequality (Eagles & McCool, 2002). Tourism can lead to price inflation of goods and housing (Oberholzer et al., 2010).

Changes over time may occur to these public lands; boundaries could shift or new organizations could take over the land management. When designations occur without the involvement of people in the area, there are costs involved, and potential repercussions for both residents and local resource management staff (Petrzelka & Marquart-Pyatt, 2012). A designation identifies an area of land for a certain purpose or use. Success can be found when there is cooperation between gateway communities and public land

managers (McMahon 1999). A lack of inclusion of residents' voices in the designation results in tension and resistance by the local residents to preserve regulations such as restricted hunting, and burning and felling of forests (Petrzelka & Marquart-Pyatt, 2012). Such was the case in the gateway communities surrounding Grand Staircase-Escalante National Monument. When it was created, opposition to a top-down creation and protection of public lands resulted from a loss of anticipated economic opportunities from a proposed coal mine as well as anticipated impacts of future restrictions on traditional uses of the public land (Petrzelka & Marquart-Pyatt, 2012). There was also strong opposition due to the manner by which the designation was created as local community members felt that they were not included in the planning process. According to McCool, "When people are left out of the decision-making process, it gives them a great incentive to sabotage anything that comes out of that process" (McCool, 2001).

Such animosity towards outside forces can lead to tensions in these gateway communities. Members of individual gateway communities could begin to feel that while in the past there was a community, changes have resulted in the loss of community (Bender, 1978). Scholars have found that communities can become disjointed when there is a separation of social life and economic and political life (Brown et al. 2000). Such community bifurcation causes an individual in the society to be highly attached to their local community while having very little satisfaction in living there. Inversely, it could also lead to individuals having little or no attachment to their community, but being highly satisfied with their economic opportunities and access (Muir et al. 2018). Gateway communities are susceptible to major shifts in the way individuals experience community.

### Psychological Sense of Community

We will look at the impact changes in land designation have on gateway communities by evaluating in one community the changes in psychological sense of community related to changes in Bears Ears National Monument designation. For this study we will be using the definition of community recognized by Bender: "community as an aggregate of people who share a common interest in a particular locality" (Bender 1978). Sense of community is described as "feelings that members have of belonging, of significance to one another and to groups, and as shared faith that members' needs will be met through their relationships" (McMillan & Chavis 1986). The strongest predictors of actual sense of community have been found to be length of residency, community satisfaction, and community knowledge (Glynn 1981). Early community sociological studies proposed a four-part structure for measuring the sense of community: 1) relationship to the organization, 2) organizations as mediators, 3) influence of the organization, and 4) bond to the community (Hughey et al. 1999). Similar models have been produced more recently operationalizing these frameworks into four elements including membership, influence, integration and fulfillment of needs (Peterson & Martens 1972). These four components combined help to provide an understanding of a person's sense of community. The four frameworks are intended to capture the interactions and connections a person can have to their community and the people in their community. For the purposes of this paper, we will use this sense of community model to measure the

effects that Bears Ears has on the surrounding communities. Each of the four elements will be used to elaborate on overall community experience.

#### *Integration and Needs Fulfillment*

According to McMillian and Chavis, the integration and needs fulfillment in a community can also be called reinforcement (McMillan & Chavis 1986). This reinforcement is the idea that for a community to maintain a positive sense of togetherness individuals must have their needs met or some sort of reward from being a part of the group. Communities fulfill many various needs and the ultimate goal is for a community to bring people together so they are meeting their own needs while also fulfilling the needs of others.

#### *Membership in the Community*

The sense of membership is a feeling that one is giving a part of themselves to become a part of a larger group to belong there (Aronson & Mill 1959). When one works toward membership, they will feel that they have earned a place in that group and that their personal investment was meaningful and has value (McMillan & Chavis 1986). Membership has five attributes: personal investment, a sense of belonging and identity, boundaries, a common symbol system and emotional safety (McMillan and Chavis 1986).

#### *Influence*

Community influence is measured by the influence that a person has on their community, and the influence that community has on an individual. In order for someone to be attracted or feel attachment to a group they need to feel some influence over what it does (Peterson & Martens 1972). According to McMillian and Chavis the influence of the community on its members and the influence of the members on the community operate concurrently and we can expect to see them both working together in tight knit communities (McMillan & Chavis 1986).

#### *Shared Emotional Connection*

In a tight knit community, residents will feel connected to the community and the individuals in that community and their level of connection influences their community satisfaction. When people have a shared history or shared events it can facilitate the strength of the unity (McMillan and Chavis 1986). This shared connection can be enhanced by the shared importance of events; for example, if there is a natural disaster or crisis, communities are found to come together and bond. There can also be a connection between individuals by a spiritual bond usually brought by religious affiliation, when people feel spiritually bonded with each other through shared beliefs (Bernard 1973). Strong communities offer residents positive ways to interact, opportunity to spiritually and emotionally bond, and ways to invest in the community and each other (McMillan & Chavis 1986).

## II. Study setting

To explore the effects of outside influence on community experience we rely on the psychological sense of community for the population surrounding the Bears Ears National Monument. The residents in the communities that surround Bears Ears National Monument are greatly impacted by all of the proposed changes and speculation surrounding land close to them. A national monument could change a lot about their hometown and create unwanted changes. We will aim to better understand this perception of the communities surrounding Bears Ears National Monument and seek to understand if the Bears Ears Monument designation changes those feelings.

In the southeast corner of Utah stands two natural buttes which rise above the desert horizon appropriately named Bears Ears. The area is rich with fossils and archeological sites from peoples throughout the ages dating back as far as 14,000 years (Bears Ears Coalition). The land was home to a few different groups of ancient Puebloan people who left dwellings, followed by Hopi, Navajo and Zuni communities who lived on the land. When moving west, pioneers also settled in the area. Recently, in 2016, President Barack Obama declared the land in southeastern Utah the Bears Ears National Monument (BENM). One year later President Donald Trump declared a change to the designation, reducing the land of BENM by 85% (Ceurvorst 2018). Currently the monument land designation and boundaries are under review and subject to change under President Joe Biden. These recent land designation changes not only affect the land, but the communities of people who live near.

### San Juan County

In order to understand the complexity of the Bears Ears situation it is beneficial to understand the context of the area. Bears Ears is located in San Juan County in the southeast corner of Utah. San Juan county has two main communities and natural beauties like Cedar Mesa, Lake Powell, Canyonlands National Park and Glen Canyon. The San Juan county area specifically has thousands of ancient Anasazi archaeological sites spread throughout the county. The two largest communities in San Juan county were settled by pioneers affiliated with The Church of Jesus Christ of Latter-day Saints. In these small communities the highest paying industries are Mining, Quarry, and Oil and Gas Extraction (Data USA). The lower portion of San Juan County includes land that is the Navajo Nation.

### Timeline

A land rich with history, BENM has been home to many communities over hundreds of years, which creates a deep and complex web of connections and sense of belonging to many different groups. The BENM area is known to contain over 100,000 cultural and archeological sites (Creadon and Bergren 2019). This makes the area one of the most significant archaeological areas in the United States. Archeological evidence has found that there were people inhabiting the area as early as 11,000 BC at the Lime Ridge Clovis site, and Native people claim their standing there even earlier. The most populated the Bears Ears area ever was during the Basket maker period (500 BC to AD 750) and the Pueblo period (AD 750- AD 1290) (Buttes et al.). The Navajo and Ute people live all across the Bears Ears region and have left sweat lodges, tipi rings, hogans and rock art panels. (Creadon & Bergren 2019). Historically and currently the Navajo, Ute and Paiute people

use the ancient trails for seasonal hunting and for religious ceremonies. The Zuni people even at one point occupied the areas, migrating out however likely due to climate change, but they left markings that acted as maps and recorded songs and prayers (Buttes et al. 2021). Similar to cultures going to gravesites to leave flowers on tombs, Indigenous peoples travel to these sacred lands to connect to ancestors and have reverent sacred spaces. The land that surrounds Bears Ears also has ancestral ties for a completely different population. In much more recent history, the communities next to the mesa were founded by Mormon settlers in the late 19th century, who came to extract natural resources (Deloitte 2019).

In May of 2010 the Navajo formed a committee to stand up for the cultural needs of the area and submitted a preliminary land use proposal for the protection of Bears Ears and surrounding canyonlands (Bears Ears Coalition). It was not until 2013 that the Public Land Initiative created a proposal to protect Bears Ears, prohibit oil development and have the Navajo nation be a co-manager of the lands. Then in 2015 Utah's five tribes, the Hopi Tribe, Navajo Nation, Ute Mountain Ute Tribe, Pueblo of Zuni and Ute Indian Tribe, formed the Bears Ears Inter-tribal coalition to advocate for the indigenous interests for the area, and they met with the US government to discuss a National Monument proposal for President Barack Obama. (The Bears Ears Inter-tribal Coalition). In the summer of 2016, a large meeting was held with ranchers, Native Americans, rock climbers, environmentalists, and Mormon pioneer descendants to hear testimonies and the opinions of the people who would be affected by a land management change. Then in December of 2016, using the Antiquities Act of 1906, President Obama created the Bears Ears National Monument (Buttes et al. 2021). However, not even a year later, in December of 2017, President Trump officially cut the Bears Ears National Monument by 85% and Grand Staircase by 46%. The reactions from local people were mixed. Navajo tribal president Russell Begaye was outraged and called it a "failure to listen to the concerns of our people" (Creadon and Bergren 2019).

### Land Management

The Bears Ears question depends on land management. There are four primary land management agencies in the United States federal government, and those agencies manage different kinds of land designations. The Bureau of Land Management governs land under multiple-use and sustained-yield principles. They manage land that is used for mineral, oil and gas extraction, livestock grazing and hunting (Ceurvorst 2018). The National Forest Service manages mineral, oil and gas extraction, livestock grazing and hunting and logging gas development while the park service focuses on preservation and conservation within public use and for people's enjoyment and recreation (Ceurvorst 2018). Land designation is typically decided by the federal government. Congress establishes national parks and national monuments through legislation. The President can also establish a national monument by using the Antiquities Act of 1906.

In order to understand why some groups would be upset with a land designation change we should understand more about land designations. Land can be designated as a wilderness or be a wilderness study area. This limits any roads, motor vehicles or structures from being built, and severely limits human use (Ceurvorst 2018). A national monument

is less restrictive than a wilderness area. Designating land as a national monument restricts it from unlimited public use such as grazing, off-road vehicles, logging, mining and oil and gas extraction (Sanders 2016). National parks usually have more recreational features and are larger in size, while national monuments are primarily established to protect historic, scientific, or natural features (Creadon and Bergren 2019).

In regards to people's feelings towards land designations, environmental groups or groups that are associated with issues surrounding federal land are more aware of the designation than people who are not part of environmental groups (Machairas and Hovardas 2005). The local groups who live around the land designation area have varied opinions. Research has shown that geographic proximity to a designation site has an effect on awareness and attitudes toward a designation. People who live closer to restrictive land designations tend to have more negative attitudes because their lives are more directly affected by them (Durrant and Shumway 2004; Lamborn 2014).

Large conservation groups and many outdoor brands support Bears Ears becoming and staying a national monument. One of the largest brands who rallied behind Bears Ears was Patagonia. They boycotted the Outdoor Retailer convention, usually held in Utah, in protest when the monument was shrunk. They opposed the Utah legislator's requests to shrink the size of the monument. Other major brands like Arc'teryx and Polartec pulled out as well, causing the convention to move to a different state. Patagonia's stance was that establishing the land as a national monument would halt threats posed by oil and gas development and would bring visitor education and protect sacred Native American sites (Patagonia 2021). They support the monument and help in efforts to reduce threats from irresponsible development while wanting to protect and grow Utah's recreation economy. It's not just large corporations, local residents are supportive of the monument as well.

Mark Maryboy is a key Bears Ears consultant for Utah Dine Bikeyah and five tribe coalition and played a critical role in the efforts to interview Utah Navajos and Utes that led to the intertribal proposal for Bears Ears. Part of that proposal is that the tribe would manage the monument. Maryboy is quoted saying, "I do think we have a very sophisticated plan, dealing with endangered species, talking about traditional use, ancient sites, paleontology - Bears Ears is where you find a lot of those, and they need to be protected" (Kovash 2017). There is a possibility that with the monument designation, the local communities would experience an increase in tourism and risk becoming gateway communities. To this notion Maryboy says, "(Tourism) is a sustainable, sufficient economic development versus energy development. Energy development- is short lived. - all it does is leave toxic material in the ground and in the air" (Kovash 2017). Yet Maryboy does have concerns; "I personally don't want (these communities) turned into Park City or a huge town. The main thing is we protect the land, we protect the archeology, we protect the traditional sites, and the tribal members continue to practice their traditional way of life" (Kovash 2017).

Negative feelings toward federal land can also arise for people who live in the areas because they experience and perceive negative impacts on their livelihoods and their environments (Durrants and Shumway 2004: Lamborn 2014: Ceurvorst and Lamborn

2018). The more time people spend in an area they are likely to develop strong perceptions of federal land designations. The more attached and involved people are to their communities due to heritage, birthplace or other reasons, the more likely they are to have a negative feeling towards outside forces changing their communities (Um and Crompton 1987). According to Peng et al. (2016) an increase in tourism in rural communities leads to dissatisfaction in the host community. Much of local opposition came from residents who declared they don't want to become 'another Moab'. Phil Lyman, San Juan County Commissioner, expressed these sentiments in an interview. He views the communities surrounding Bears Ears National Monument as thriving communities with education and culture. He compares them to Moab saying, "it's (Moab) a place for recreation and partying - the only people that have a problem with what (the local communities are currently like) are people from Colorado or the Wasatch Front. They come down here and say, hey we think it would be smart to be someone other than what you are" (Kovash 2017).

"Become another Moab", refers to long term residents' fears of an increase of tourism and visitors to the area after it becomes a monument. Increases in tourism typically occur overtime for gateway communities. This increases economic activity in the areas but also brings in outside traffic (Weiler and Seidl 2004, Fredman et al. 2007). However, despite the increase in tourists, tourism does not always disrupt the local attachment and sense of community (Um and Compton 1987). This is the case for the communities near Bears Ears, as the Retail trade industry is among the top 3 largest industries (Data USA). Nelson (2001) found that when land management changes occur in small rural communities there is restructuring and a loss of identity when economic situations change. Again, quoting Commissioner Lyman, local residents could see the designation as "basically a land grab through disingenuous narrative pushed by the environmentalists" (Kovash 2017).

### Proposed Analysis

The literature addresses concerns about land changes and about how attitudes change with the designation changes or decision processes. Studies have shown that host communities are one of the most important stakeholders in the decisions related to tourism and development (Peng et al. 2016). They also show that outside influences can have effects on community sentiments and attachments (Cope et al. 2016). Additionally, when stakeholders are excluded from the designation decisions, negative attitudes in the region can increase (Machairas & Hovardas 2005). While the existing data analyzes host communities and general sentiment behind designation changes, there are still many communities that have not been studied. In the local communities surrounding Bears Ears people are building communities based on their sense of place and proximity to open or restricted lands, and if boundaries are changed it could change the way people experience community.

This research aims to fill the gap and specify how one local community feels about the Bears Ears land designation changes. This research will answer the question: how does the notion of the national monument change the way people experience their community? To answer this question, we will be using data collected from a survey that asked residents

of rural communities' questions about their community experience in the context of the proposed National Monument land management changes. The dependent variable will be the four components of the systemic model of community while the independent variable is opposition for the creation of the Bears Ears National Monument. We will control for various identifying components as well.

### III. Data and Methods

#### Sample

We use data gathered from a community survey that was sent to 26 rural communities across the state of Utah in 2017 to investigate the community attachment and satisfaction of the residence as well as their opposition for the Bears Ears National Monument. The principal unit of analysis is residents of the rural communities in southern Utah that border the Bears Ears National Monument. The surveys were filled out once and mailed back to capture the residents' response at the time the survey was administered. There was a survey administered to all 26 communities in Utah. The survey questions for both surveys were the same so the data was combined in order to look at all of the communities together. The surveys include the questions that are used to assess psychological sense of community, making the comparison with psychological sense of community literature straightforward.

#### Model

Our approach is an elaboration of Kasarda and Janowitz's model of community, which has been used when studying community attachment and satisfaction systemic (Kasarda & Janowitz 1974). Our goal is to measure the effect of The Bears Ears National Monument on social ties, attachment and satisfaction. We control for age, length of residency, children, marital status, education, religion, race and ethnicity, and gender. We have included table 1 of descriptive statistics for the sample.

Table 1: Descriptive Statistics

	Mean	Percent	Standard Deviation
<b>Dependent Variables</b>			
Needs Fulfilment	4.53		1.31
Membership	5.49		1.54
Influence	4.77		1.27
Emotional Connection	5.33		1.50
<b>Independent Variable</b>			
Opposition to Bears Ears	5.85		1.88
<b>Control Variables</b>			
Age	62.26		16.70
Length of Residence	0.58		0.33
Children	0.64		1.26
Marital Status (% Married/Widowed)		87%	
Education	4.48		1.87
Religion (% LDS)		75%	
Race (% White)		91%	
Gender (% Male)		52%	

## Dependent Variable

There are four different aspects that make up the psychological sense of community model and these four components were all calculated as their own independent variable

### *Integration and Needs Fulfillment*

The needs fulfillment variable was created based on two questions from the survey that were intended to measure how well the community fulfills a person's needs. The questions were “I can get what I need in my community,” and “My community helps me fulfill my needs.” The scale for both of the original questions was an ordinal scale from *strongly disagree* to *strongly agree*, so the new needs variable has the same scale with 1 being *strongly disagree* and 7 being *strongly agree*.

### *Membership in the Community*

In the data there were two survey questions that were combined to create a membership measure. The combination was between the question, “I feel like a member of my community” and “I belong in this community.” It was measured on an ordinal scale of *strongly disagree* as a 1 and *strongly agree* as a 7. The responses were cleaned and coded to follow this scale with a 1 being a strong disagreement and 7 being very much in agreement.

### *Influence*

The data has two survey questions that were used to measure influence: “I have a say about what goes on in my community,” and “people in my community are good at influencing each other.” Both of these questions were measured on an ordinal scale ranging from 1 being *strongly disagree* and 7 being *strongly agree*. The responses from these two questions were cleaned and coded to create an influence variable that captures both community influence on an individual and the individual's influence on the community.

### *Shared Emotional Connection*

The emotional connection variable was generated by combining two of the questions from the survey: “I feel connected to this community” and “I have a good bond with others in my community.” Both of these questions were measured on an ordinal scale ranging from 1 being *strongly disagree* and 7 being *strongly agree*. The responses from these two questions were cleaned and combined to create a variable that captures people's emotional connection to their community and to other residents on a scale from 1 to 7.

## Independent Variable

The independent variable for these models is opposition for the Bears Ears National Monument. This variable is based on a survey question in which respondents were asked, “how much do you support the creation of Bears Ears National Monument in San Juan County?” This variable was reverse coded to make sure the regression outputs were easier to interpret. The responses range from 7 being *strongly opposed* and 1 being *strongly favor*. The data was cleaned for any missing responses.

## Control Variables

### *Age*

We measure the age of respondents by taking the responses from the year they were born and subtracting it from the year the survey was given. This method helps to avoid respondent errors and can give us an accurate accounting of respondent's age. The age variables range from 1 to 106. The age variable is measured in years.

### *Length of Residence*

We measured the length of residence as a proportion of one's life residing in the community. This measure involved dividing the number of years a respondent indicates they lived in the community by their age. Studies often use the raw number of years of residents in a community to measure length of residence, although that could conflate the effects of length of residency and age which we also control for (Goodsell et al. 2008; Flaherty & Brown 2010). In our data with rounding the length of residence ranges from 0 to 1. Length of residence is measured by the respondents' portion of life that they lived in the community minus years of residents divided by age.

### *Children*

Number of children is measured based on the respondents' responses from the question about how many children one has. The responses were capped at 7 to eliminate outliers. The range of number of children is from 0 to 7 or more. We measured 0 to 6 children as responses.

### *Marital Status*

Marital Status was measured based on the question in the survey asking people to indicate if they were married, separated, widowed, divorced or never married. To create a dichotomous variable, we combined married and widowed. We did this because being married and being widowed, more than the other categories can cause and create variation in how attached or satisfied one feels in their community. They both signify a decisive connection or lack of connection to another person. We recoded these variables to indicate that married and widowed were distinguished outside of all the other categories, married and widowed = 1 and other = 0.

### *Education*

The amount of education is measured based on the respondents' answers to the question "what is the highest grade or level in school?" The values range from 11th grade or less being the lowest ordinal value with a numerical value of 1, to a graduate degree being the highest ordinal value with the numerical value of 7.

### *Religion*

Religious affiliation and membership in a group helps to provide a "significant source of identity" for people involved in that community (Miller 2001). Being a part of a religious organization gives residents in a community a chance to develop social relationships and build bonds in their community. We measured religion in this study based on respondents' answers to a question about their religious affiliation. The large majority

of respondents indicated that they are members of the Church of Jesus Christ of Latter-day Saints (LDS or Mormon). Due to this large majority, we distinguish people who are LDS affiliated from all of the other religions indicated, 1 = LDS, 0 = Other.

#### *Race and Ethnicity*

We controlled for race by creating a dichotomous variable. Since white was again a large majority of the respondent's race, we distinguished white from the other races, white = 1, and other = 0.

#### *Gender*

We controlled for gender in a similar fashion, creating a dichotomous variable where the category with the most responses is coded as 1 and the other as 0. For this instance, male = 1 and female = 0.

#### Modeling Strategy

Ordinary logistic regression is used to estimate the models with the psychological sense of community variables, needs fulfillment, membership, influence and emotional connection as dependent variables because the variables are ordinal. For all of the models, the independent variable is opposition for Bears Ears National Monument which is also measured as an ordinal scale. With the control variables, the constants indicate the estimated value of the dependent variables in 2017 for white, males, LDS respondents who are married or widowed and who are of the overall mean length of residence, age, education and have a mean number of children

## IV. Results

Table 2

Table two represents the results of the regression analyzing the relationship between shared emotional connection and the opposition toward the creation of Bears Ears National Monument. Model one is the results of a regression that is effectively a bivariate regression between the change in shared emotional connection and the opposition to Bears Ears. Model one shows a significant finding between the opposition and emotional connection signifying that the less support people have for the creation of Bears Ears National Monument the stronger their emotional connection is to their community.

Table 2: OLS regression of the change in shared emotional connection based on opposition to Bears Ears National Monument with control variables.

	Model 1	Model 2
Opposition to Bears Ears	0.137***	0.126*
Age		0.009
Portion of Life		0.136
Children		-0.012
Married/Widowed		0.521*
Education		0.058
Latter-day Saints		1.125***
Race		0.250
Gender		0.157
Constant	4.426***	2.294***
R-squared	0.034	0.262
Adjusted R-squared	0.033	0.239

N=294

Data pulled from the Utah Community Study 2017.

\*p<.05 \*\*p<.01 \*\*\*p<.001

Model two presents the regression of psychological sense of community and opposition for Bears Ears while controlling for age, portion of life spent in the community, children, marital status, education, religion, race and gender. Several of the control variables are significant including married/widowed and Latter-day Saint affiliation. Both models suggest that overall, the less support people have for the Bears Ears National Monument, the stronger their emotional connection is to their community.

Table 3

Table three represents the regression analysis between community influence and the opposition to the creation of Bears Ears National Monument. Model one presents the regression between the change in perceived community influence and the opposition of the creation of Bears Ears National Monument. The model showed a significant relationship between opposition to the monument and community influence, meaning that the less support people have for the Bears Ears National Monument, the greater they feel like they have influence on their community, and their community has influence on them.

Table 3: OLS regression of the change in community influence based on opposition to Bears Ears National Monument with control variables.

	Model 1	Model 2
Opposition to Bears Ears	0.099***	0.086*
Age		0.007
Portion of Life		0.194
Children		0.054
Married/Widowed		0.325
Education		0.056
Latter-day Saints		0.889***
Race		0.246
Gender		-0.130
Constant	4.080***	2.335***
R-squared	0.022	0.229
Adjusted R-squared	0.021	0.204

N=294

Data pulled from the Utah Community Study 2017.

\*p<.05 \*\*p<.01 \*\*\*p<.001

Model two is the regression run when factoring in the control variables. Latter-day Saint affiliation was the only control variable that showed significance other than opposition to the monument. The second model also finds that, overall, the less support people have for the Bears Ears National Monument, the more likely they were to feel that they had influence in their community.

Table 4

Table four represents the regression analysis between change in membership and the opposition to the creation of Bears Ears National Monument. Model one is the regression run between the change in membership and the opposition of the creation of Bears Ears National Monument. The model showed a significant relationship between opposition to the monument and change in membership meaning that the less support people have for the Bears Ears National Monument, the greater they feel that there has been a change in membership in their community.

Table 4: OLS regression of the change in membership in the community based on opposition to Bears Ears National Monument with control variables.

	Model 1	Model 2
Opposition to Bears Ears	0.145***	0.163*
Age		0.002
Portion of Life		-0.059
Children		-0.156
Married/Widowed		0.888**
Education		-0.062
Latter-day Saints		0.941**
Race		-0.302
Gender		-0.182
Constant	4.481***	3.638***
R-squared	0.036	0.260
Adjusted R-squared	0.035	0.217

N=294

Data pulled from the Utah Community Study 2017.

\*p<.05 \*\*p<.01 \*\*\*p<.001

Model two shows a regression that factors in the control variables. Again, several control variables have significance including married/widowed and Latter-day Saints affiliation. The second model also finds that, overall, the less support people have for the Bears Ears National Monument, the more likely they are to experience a change in their membership in the community.

Table 5

Table five represents regressions between the change in needs fulfillment and the opposition to the creation of Bears Ears National Monument with and without control variables added. Model one is the regression between the change in needs fulfillment and the opposition of Bears Ears. The model finds that the relationship between opposition and needs fulfillment is significant, meaning that the less people support Bears Ears, the more likely they are to feel that their basic needs are not being met in their community. This means that without control variables, the data suggests, people who oppose Bears Ears becoming a National Monument have a harder time fulfilling their needs of food, labor, housing ect.

Model two is the regression when factoring in the control variables. The control variables of age and LDS affiliation were significant, however opposition to the monument was not found to be significant. This indicates that we cannot determine whether there is a significance between respondents feeling that their communities fulfill their needs and opposition for Bears Ears. Statistically people are more likely to feel that their needs are being met, however, once the other control variables are included, we can see that there is no significant difference. The second model suggests that Bears Ears National Monument does not actually affect the way people's needs are met. Despite having strong opposing feelings toward the monument, people are still able to have all of their needs met in their communities.

Table 5: OLS regression of the change in integration and needs fulfillment based on opposition for Bears Ears National Monument with control variables

	Model 1	Model 2
Opposition to Bears Ears	0.062**	0.055
Age		0.014*
Portion of Life		0.359
Children		0.109
Married/Widowed		0.145
Education		0.061
Latter-day Saints		0.810***
Race		0.096
Gender		-0.188
Constant	4.023***	2.05***
R-squared	0.008	0.187
Adjusted R-squared	0.007	0.161

N=294

Data pulled from the Utah Community Study 2017.

\*p<.05 \*\*p<.01 \*\*\*p<.001

Overall, several of the control variables are significantly related to opposition for Bears Ears. LDS affiliation, in particular, stands out as across all four dependent variables the constant came out with a significant relationship. This means that those individuals who are LDS affiliated feel stronger connections, attachments and membership in their communities and they likely feel they have a greater influence and their needs are met.

## V. Discussion

In this paper we set out to determine what effect the potential of a land management change would have on a gateway community, using Bears Ears National Monument as a case study. We were interested to see how the four elements of the Psychological sense of Community were affected by the rhetoric and discussion surrounding the creation of a monument. We found that overall, the less support people have for the Bears Ears National Monument, the stronger their emotional connection is to their community. This is important because despite the disruption in their community, people felt that they had a closer emotional connection to their community. The findings echo previous research that suggests outside forces influence communities' sense of attachment and satisfaction (Muir et al. 2018). In this case, in 2017 the outside influences talking about the possible changes that might be made in land management seemed to give a majority of community members a rallying point, strengthening their emotional connections to each other.

We found the less support people have for the Bears Ears National Monument, the more likely they were to feel that they had influence in their community. Similar to emotional connection, if the majority of people in the community have similar feelings, people are able to feel like they have influence. This aspect of community refers both to the influence individuals have on what happens in their community and that the community members are good at influencing one another. This is important because it shows that even if outside influences are viewed as a negative threat, the individuals feel their influence in their community is strengthened.

We found the less support people have for the Bears Ears National Monument, the more likely they were to feel they belonged as a member of their community. This is important because we found that an individual's sense of belonging is enhanced when they can rally together in opposition against something.

However, we found Bears Ears National Monument does not actually affect the way people's needs are met. Remember that, according to McMillan and Chavis, needs fulfillment is the idea that for a community to maintain a positive sense of togetherness individuals must have their needs met or some sort of reward from being a part of the group (McMillan & Chavis 1986). We found that despite having strong opposing feelings toward the monument, people are still able to have all of their needs met in their communities. This is important when contrasted with the other elements of psychological sense of community, fulfillment of needs is not affected by these outside influences. This is interesting because the findings suggest that the actual community resources and services do not change the way they provide for the needs of the members of the community when outside influences are talking about proposing changes.

These results show that even the talk about types of land management changes like this that are done to rural areas, can have real effects on the way community members experience and interact with their communities. The results suggest that the more people feel attached and satisfied in their communities, the less likely they are to support the creation of the Bears Ears National Monument. They feel that they have more influence and those who do not support Bears Ears feel a greater sense of membership in their community. These findings contribute to existing literature by helping to capture a moment

in time and show that the rhetoric and buzz that surrounds the creation of national monuments impacts the way people in surrounding areas experience their community.

### Limitations

The data collected that will be used for this study has limitations. The large majority of the sample is white and the data sample fails to capture many nonwhite respondents. Very few respondents are people of Native American descent. The demographics of the data mean the results capture the changes of community to specifically white rural gateway communities. Future research can work on expanding the data, addressing this limitation by surveying individuals who live on reservations surrounding public lands and studying the effects of community in minority communities. At the time the data was collected Bears Ears was not made a monument yet, there was only talk about it becoming one. There are time limitations on the data as it captures a specific moment in time. The analysis concerns itself with capturing the changes in community experience based on the discussions of potential changes to the community. The location and Bears Ear National Monument is intended to be used as a case study to test the psychological sense of community on gateway communities. Future research could be done in the same community to measure if those changes have remained after the monument was reduced in size and expanded again.

In conclusion I echo the words of Mendez-Contreras; “when people feel excluded from the establishment of an NPA (natural protected areas) in a territory that, for historical, customary or legal reasons belongs to them or they perceive as being theirs, they assume the ‘outsiders’ establishing it form part of a group external to their community, with contrary objectives and interests” (Mendez-Contreras et al. 2008: 112). Public protected areas and gateway communities are linked socioeconomically, environmentally and culturally, and changes in the land designations can have great impact for individuals in those communities. Again, McCool argues that “when people are left out of the decision-making process, it gives them a great incentive to sabotage anything that comes out of that process” (McCool, 2001). The way that individuals feel connected to their community and place matter. As we make land designation changes and focus on protecting places and natural lands, we need to consider the effects that will be had on the surrounding communities.

## References

- Aronson, E., & Mills, J. (1959). The effect of severity of initiation on liking for a group. *Journal of Abnormal and Social Psychology*, .59, 177-181.
- Bears Ears Coalition (n.d.). Native American Connections. Bears Ears Coalition.
- Bender, T. (1978). Community and social change in America. *The John Hopkins University Press Baltimore & London*, 53(1), 3–15. <https://doi.org/10.1086/643714>
- Bernard, J. S. (1973). *The sociology of community*. Glenview, IL: Scott, Foreman.
- Buttes, B., Overlook, B, Towers, C. Kiva, M. and Rock, N., 2021. *Bears Ears National Monument - Visitors Information*. [online] Bears Ears Education Center.
- Brown, Ralph B., Xiahoe Xu, Melissa A. Barfield, and Brayden G. King. 2000. "Community Experience and the Conceptual Distinctness of Rural Community Attachment and Satisfaction A Measurement Model." *Community Sociology* 10:427–46.
- Ceurvorst, Robyn L. and Chase Lamborn. 2018. "Visitor Attitudes and Value orientations for a proposed national monument." *Journal of Outdoor Recreation and Tourism* 1-23: 33-43
- Cope, M. R., Slack, T., Blanchard, T. C., & Lee, M. R. (2016). It's Not Whether You Win or Lose, It's How You Place the Blame: Shifting Perceptions of Recurrency in the Context of the Deepwater Horizon Oil Spill. *Rural Sociology*, 81(3), 295-315. doi.10.1111/ruso.096
- Creadon, Samantha, and Erin C. Bergren. "Bears Ears National Monument: Politics, Controversy, and Potential Remedies." *Case Studies in the Environment* (2019).
- Deloitte. (2019). *Blanding, UT*. Data USA.
- Durrant, Jeffery O. and J. Matthew Shumway. 2004. "Attitudes Toward Wilderness Study Areas: A Survey of Southeastern Utah Counties." *Environmental Management* 33(2): 271-283.
- Eagles, P. F., & McCool, S. F. (2002). *Tourism in national parks and protected areas: Planning and management*. Cabi.
- Flaherty, Jeremy and Ralph B. Brown. 2010. "A Multilevel Systemic Model of Community Attachment: Assessing the Relative Importance of the Community and Individual Levels." *American Journal of Sociology* 116: 503-542
- Fredman, Peter, Lisa Hornsten Friberg, and Lars Emmelin. 2007. "Increased Visitation from National Park Designation." *Current Issues in Tourism* 10(1): 87-95.
- Glynn, T, J. (1981). Psychological sense of community: Measurement and application. *Human Relations*, 34, 780-818.

- Goodsell, Todd L., Ralph B. Brown, Joshua Stovall, and Mark Simpson. 2008. "Globally Embedded Community: Satisfaction and Attachment in Vance, Alabama." *Community Development: Journal of the Community Development Society* 39:17-34
- Hughey, J., Speer, P.W., & Peterson, N.A. (1999). Sense of community in community organizations: Structure and evidence of validity. *Journal of Community Psychology*, 27, 97–113.
- Kasarda, John D. and Morris Janowitz. 1974 "Community Attachment in Mass Society." *American Sociological Review* 39:328-339.
- Kovash, J. (2017, January 11). *Part 1: The Argument For And Against Bears Ears National Monument*. UPR Utah Public Radio. <https://www.upr.org/news/2017-01-10/part-1-the-argument-for-and-against-bears-ears-national-monument>
- Kovash, J. (2017b, January 11). *Part 2: The Argument For And Against Bears Ears National Monument*. UPR Utah Public Radio. <https://www.upr.org/news/2017-01-11/part-2-the-argument-for-and-against-bears-ears-national-monument>
- Lackey, N. Q., & Bricker, K. (2020). The relationship between parks and protected areas and gateway communities in the United States and Canada: A scoping review. *Journal of Park and Recreation Administration*. <https://doi.org/10.18666/jpra-2020-10390>
- Lamborn, Chase. 2014. "Examining Visitor Attitudes Toward the Proposed Greater Canyonlands National Monument: A Visitor Survey in Utah's Indian Creek Corridor." *Utah State University: Institute for Outdoor Recreation and Tourism*.
- Machairas, Loannis, and Tasos Hovardas. 2005. "Determining Visitors' Dispositions Toward the Designation of a Greek National Park." *Environmental Management* 36(1): 73-88
- McCool, D. (2001). Grand Staircase-Escalante National Monument: Lessons for a Public Lands Peace Process in Utah. *Journal of Land, Resources, & Environmental Law* 21:613-618.
- McMahon, E. T. (1999). Gateway Communities. *Planning Commissioners Journal*, 34, 6–7.
- McMillan, D. W., & Chavis, D. M. (1986). Sense of community: A definition and theory. *Journal of Community Psychology*, 14(1), 6–23. [https://doi.org/10.1002/1520-6629\(198601\)14:1<6::aid-jcop2290140103>3.0.co;2-i](https://doi.org/10.1002/1520-6629(198601)14:1<6::aid-jcop2290140103>3.0.co;2-i)
- Miller, Joshua. 2001. "Family and Community Integrity." *Journal of Sociology and Social Welfare* 28: 23-44.
- Mendez-Contreras, J. I., Dickinson, F., and Castillo-Burguete, T. (2008). Community Member Viewpoints on the Ria Celestun Biosphere Reserve, Yucatan, Mexico:

Suggestions for Improving the Community/Natural Protected Area Relationship. *Human Ecology* 36: 111-123.

Muir, Jonathan A., David B. Braudt, Jeffrey Swindle, Jeremy Flaherty, and Ralph B. Brown.

2018. "Cultural Antecedents to Community: An Evaluation of Community Experience in the United States, Thailand, and Vietnam." *City & Community* 17 (2): 485–503. <https://doi.org/10.1111/cico.12300>.

Nelson, Peter B. 2001. "Rural restructuring in the American West: land use, family and class discourses."

Oberholzer, S., Saayman, M., Saayman, A., & Slabbert, E. (2010). The socioeconomic impact of Africa's oldest marine park. *Koedoe*, 52(1), 1–9.

Patagonia. (2021, November 18). *Five Reasons Bears Ears Needs to be Protected as a National Monument*. Patagonia. <https://www.patagonia.com/stories/five-reasons-bears-ears-needs-to-be-protected-as-a-national-monument/story-30419.html>

Peng, Jian, Xu Chen, and Jian Wang. 2016 "Applying relative deprivation theory to study the attitudes of a host community resident towards tourism: the case study of the Zhangjiang national Park, China." *Current issues in Tourism* 19(7): 734-754.

Peterson, J. A., & Martens, R. (1972). Success and residential affiliation as determinants of team cohesiveness. *Research Quarterly*, 43, 63-76.

Peterson, N. A., Speer, P. W., Hughey, J., Armstead, T. L., Schneider, J. E., & Sheffer, M. A.

(2008). Community organizations and sense of community: further development in theory and measurement. *Journal of Community Psychology*, 36(6), 798–813. <https://doi.org/10.1002/jcop.20260>

Petrzelka, P., & Marquart-Pyatt, S. (2012). "with the stroke of a pen": Designation of the Grand Staircase Escalante National Monument and the impact on trust. *Human Ecology*, 41(2), 285–297. <https://doi.org/10.1007/s10745-012-9544-x>

Sanders, Matthew J. 2016. "Are National Monuments the Right Way to Manage Federal Public Lands? *Natural Resources and Environment* 31(1): 1-5

Seigel, A. (2006). Ten years later: Grand Staircase-Escalante still elicits both cheers and jeers from Utahns. Newwest.]

Smith, L., 2020. *The quiet politics and gentle literary activism behind the battle for Utah's Bears Ears National Monument*. Area.

The Bears Ears Intertribal Coalition, 2015. *Proposal to President Barack Obama for the Creation of Bears Ears National Monument*. Pp. 4-20

Um, Seoho, and John L. Crompton. 1987. "Measuring resident's attachment levels in a host community." *Journal of Travel Research* 26(1): 27-19.

Weiler, Stephan, and Andrew Seidl. 2004 "What's in a name? Extracting econometric drivers to assess the impact of national park designation." *Journal of Regional Science* 44(2): 245-262