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Navajo Nation Brain Drain: An Exploration of Returning
College Graduates' Perspectives

Quintina Bearchief Adolpho

A proposal submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of
Doctor of Philosophy

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ABSTRACT

Navajo Nation Brain Drain: An Exploration of Returning College Graduates' Perspectives

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Doctor of Philosophy

American Indian tribes face the phenomenon known across the world as the brain drain. They invest millions of dollars in educating their members, only to have little return on their investments. Many nation members leave reservations to get postsecondary education but never return, contributing to the brain drain. Those who get education off the reservation and choose to return are the exceptions to this rule. Although there is an abundance of literature regarding the brain drain across the world, there has been little research done with American Indians. In order to begin to understand the brain drain phenomenon this study analyzed unstructured qualitative interviews of 17 Navajo Nation members who left their reservation, obtained a degree and returned to work on the reservation. Themes resulting from the hermeneutic analysis of texts that describe the reason why these individuals returned were (a) Family Support, (b) Cultural Identity, (c) Simple Lifestyle, (d) Community and (e) Reservation Economy. The analysis found that constant, lengthy, and meaningful relationships were motivating factors in drawing participants back to contribute to their reservations. Those principles and teachings in the home of these returnees prompts further research in indentifying the reasons they were drawn back to their American Indian communities.

Keywords: brain drain, American Indian, Native American, education, Navajo Nation

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First and foremost I want to thank my Creator for uplifting me when I wanted to give up, for answering my prayers, and for guiding my footsteps to this point in my life. I know without him my life would be very different and I know that it is only through him that I can obtain the greatest gift, ascension.

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DESCRIPTION OF DISSERTATION CONTENT AND STRUCTURE

This dissertation, *Navajo Nation Brain Drain: An Exploration of Returning College Graduates' Perspectives*, is written in a hybrid format. This hybrid format combines traditional dissertation and journal publication layouts. The preliminary pages reflect requirements for submission to the university. The dissertation report is presented as a journal article and conforms to length and style requirements for submitting research reports to psychology and education journals. The literature review and additional support for the findings are included in Appendices A, B, C and D respectively.

Introduction

When I was a young girl my father, Clement Bearchief, would often gather us around a fire and tell us legends passed down by his grandmother. The creation story he told me has been the foundation of my education. The story goes like this:

The Creator created this earth, which we live on, and desired to provide food and nourishment for his children to live and be tested. Even today many American Indians know this earth as Mother. After he finished the creation, he called his animal creation to gather around him so he could give names to them. “Stah’ tsi’tapi” was the name given to all that live under the ground, or the underground people. “Ksah ‘kwi’tapi” was the name given to all that lived on the surface, or earth people. “Ohki’tapi” was given to all that live in the water, or water people. “Spoomi’tapi” was given to all that flew in the air, or the air people.

The Creator then asked his creations for a volunteer to feed, nourish, clothe, and shelter his children that are down on the earth. A mouse came forward, but he was much too small. A gopher, badger, coyote, and a wolf offered, but were also too small. The bear was too lazy and grouchy for the purpose. Just then, they all felt the ground trembling and saw a thick cloud of dust approaching the group. They couldn’t make out what could be the cause. Suddenly, they saw a huge buffalo bull with black horns flashing in the sunlight, and all his people running behind with him toward the group. The other animals were scared and quickly cleared a path for them to run through to the Creator. The bull ran directly at him and stopped just short. The bull, with his chest out and snorting and pawing the earth said to the Creator, “My people and I will give ourselves as your

children’s food, clothing, shelter, and anything else they need to live.” The Creator was pleased and the plan was complete.

The Creator announced that they were ready to make the journey to earth. It was night when the buffalo began their journey. The old people tell us that on a clear moonless night if you look straight up at the night sky you can still see the buffalo’s path. The White people call it the Milky Way.

The buffalo had a significant role in supporting many American Indians for many years by providing clothing, shelter, tools, food, and trade. We are now in an era that requires different resources to provide economic necessities. The elders of my tribe say, “Education is the buffalo of today.” Tribal elders consider education as the new economic hub on which our quality of life centers.

Many other tribes have come to see education as central to their survival and success, especially the Navajo Nation. Education can be correlated to economic growth (Office of Navajo Nation Scholarship and Financial Support, 2011). The Navajo Nation spends millions of dollars to develop their human capital; however, they have not realized a return in economic growth for the reservation. Tribal members leave the reservation to obtain education in areas with developed economies. Their experience in postsecondary education often creates a personal dilemma; the difficult decision of whether or not they will return to work and live on the reservation. A similar dilemma exists for many developing economies around the world.

Global Perspective

Human capital, the collective set of skills that individuals possess that add economic value to a population (Human Capital, 2015), is ranked as one of the top four factors in determining a nation’s economic development (Berry & Haklev, 2005). The literature

consistently points to raising the level of human capital through education as a significant indicator of a nation's ability to resolve poverty concerns and produce economic growth, providing its citizens with a higher quality of life. Citizens from developing economies have little access to higher education and are dependent on primary education and basic literacy as sources of raising the level of human capital (McKenzie et al., 2013). As developing countries struggle to improve their education systems, their best and brightest migrate from their native lands to developed *receiving* countries in search of education as a solution to their economic welfare. As Berry and Haklev (2005) state,

In many developing countries, the value of knowledge is in its capacity to save and enhance human lives. The absence, loss or restriction of such knowledge impacts at the lowest levels of disadvantage and poverty, in death and disease. (p. 2)

Temporary migration for education purposes is important to the welfare of developing nations. However, permanent or long-term migration of skilled human capital produces a negative effect on the native *sending* countries, when educated human capital fail to return—a phenomenon called *brain drain* (Kwok & Leland, 1982; Zweig, 1997). In the brain drain, developing countries lose precious human resources and indirectly subsidize developed countries' labor forces (Ahmad, 2004).

Berry and Haklev (2005) found that individuals participating in the brain drain chose to emigrate for reasons such as security, political unrest, discrimination, economic necessity, or professional opportunities. These were what Berry and Haklev (2005) call push/pull factors. They indicated that push factors repel students from their native countries and pull factors attracted students to host countries. Push factors included lack of employment opportunities, lower comparative salaries, and political unrest and instability (Gibson & McKenzie, 2011;

Kupfer, Hofman, Jarawan, McDermott, & Bridbord, 2004; Kwok & Leland, 1982). Common examples of pull factors may include significant increases in annual income, comfortable living conditions and lifestyles, opportunities for career advancement, better working facilities, education and safety for families, and opportunities to learn from the best (Gibson & McKenzie, 2011; Zweig, 1997).

Skilled individuals tend to look for the greatest opportunity afforded to them. Skilled individuals who desire to maximize returns will travel the world in search of the highest paid opportunity or the best living conditions (Iredale, 1999). Such individuals according to Iredale (1999) choose a location “where they feel they will be better able to use their capabilities and enjoy superior conditions of work and existence” (p. 90).

Navajo Nation Brain Drain

The Navajo Nation has struggled for decades to raise the level of human capital on the reservation by spending millions of dollars to facilitate the education of tribal members. However, the economic returns on such financial investments are low (Office of Navajo Nation Scholarship and Financial Support, 2011). Navajo Nation–funded scholarships have produced an educated tribal membership; however, scholarship recipients graduate from college and are failing to return to the reservation in significant numbers. Therefore the Navajo Nation, as a whole, is failing to forward their economic objectives. Not only is the Navajo Nation failing to realize the benefits of an increase in educated and skilled human capital, but it is also experiencing the loss of capital by indirectly subsidizing another economy’s work force.

The brain drain in many developing countries has been examined, but very little is being done to study the effects of brain drain with respect to the Navajo Nation or other indigenous communities. A Navajo Nation brain drain study, conducted by McKenzie et al. (2013) identify

reasons college educated tribal members leave the reservation and do not return. Participants provided personal accounts of why they did not return to the reservation after receiving a college education. The research identified some common push factors such as no job opportunities, housing, or conveniences. This study also found that tribal members desire to return to the reservation to live and to work, but many members experience economic and social barriers, preventing them from doing so (McKenzie et al., 2013).

Research has not been done to identify pull factors that attract educated Navajos to permanently return to work on the reservation. We determined that a study of the reasons that college educated Navajo members return would prove beneficial for the Navajo Nation and other indigenous communities. The intention of this study was to explore those reasons and help the Navajo Nation realize a better return on their education investments by contributing to the development of policies that produce systematic solutions to overcoming poverty and promoting economic growth.

Research Question

This research addressed the following question:

What are the perspectives of college educated Navajo Nation members on why they chose to return to the Nation?

Method

This study incorporated a hermeneutic qualitative method to explore the perspectives of the participants. Denzin and Lincoln (1994) stated, “Qualitative researchers study things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them” (p. 3). Qualitative interviews were utilized to understand, in depth, the experiences of the participants (Evely, Fazey, Pinard, & Lambin, 2008).

This method is based in a relational ontology. The fundamental assumption of relational ontology is the belief that relationships are primary and necessary to understanding human experience (Jackson, Slife, & Williams, 2003; McKenzie, et al., 2013). The philosophical foundation underlying this method appears to fit well with the American Indian belief that relationships provide meaning and understanding. American Indians traditionally believe that relationships with their family members, extended family, tribal members, and surrounding environment all contribute to who they become (Trusty, Looby, & Sandhu, 2002). The epistemological foundation for this method is based on hermeneutic modes of understanding (Jackson et al., 2003). Hermeneutic inquiry is a process of interpreting human experiences as texts with the intention of finding greater meaning and understanding (Kvale, 2009).

An existing data set was utilized for this study. A team of investigators, composed of members of the Diné Policy Institute and faculty and graduate students from Brigham Young University (BYU), conducted semi-structured, face-to-face, one-on-one, qualitative interviews with members of the Navajo Nation who had grown up on the reservation and then completed postsecondary education off the reservation. The current study analyzed interviews with those who chose to return to the nation.

Participants

Participants were required to have (a) lived on the Navajo Nation for a majority of their childhood years, which was defined as having spent at least one-half of their school years (K–12) attending reservation schools; (b) left the Navajo Nation to pursue and complete a post-secondary degree; and (c) returned to the Navajo Nation to live and work. We conducted interviews with 24 potential participants. For the purpose of this study only 17 interviews were

analyzed. Seven of the interviews were excluded because (a) it was determined the participant did not actually meet inclusion criteria or (b) the recording was inaudible.

Kvale (2009) suggests that a qualitative study should incorporate 15 interviews, plus or minus 10. The final determination of the number of participants is whether the collected interviews provide sufficient saturation of the topic of interest. We determined that the 17 interviews provided sufficient depth and breadth of responses for the purposes of the study.

Procedure

Participants were recruited at the Gathering of Nations, one of the largest North American Pow Wows, held in Albuquerque, New Mexico. The Diné Policy Institute and Diné College set up a booth and allowed the research team to use the space for interviews. The research team posted a sign requesting participants to take part in their research study if they met the criteria for inclusion. Those potential participants who said they met the inclusionary criteria were asked to complete a brief demographic questionnaire and an informed consent form (see Appendices C and D). A consent form was provided to the participant. The interviewer asked if there were any questions the participant had about the study. The participants signed the consent form if they agreed to participate. A copy of the consent form was given to each participant. Each interview was audio recorded.

Researchers participating in this study were trained in qualitative interviewing. A list of interview topics with guidelines and sample questions (see Appendix B) were used to help interviewers maximize the depth and breadth of the interviewee responses (Kvale, 2009). Interviewers conducted the interviews in person and one at a time. The interviews ranged anywhere from 20 to 50 minutes, with the typical interview lasting approximately 40 minutes.

Data Analysis

The same philosophical and theoretical assumptions that were utilized when conducting the interviews were the foundation of the analysis. After conducting and recording the interviews, the interviews were transcribed. The transcribed interviews were interpreted by the principal investigator using a hermeneutic interpretive method, as outlined by Kvale (2009). The hermeneutic circle can be described as looking at the parts of a whole and analyzing the parts to give greater meaning to the whole. The following describes the process followed to analyze the data.

1. The text of all the interviews was read and reread for overall understanding. This was done to carefully study the interviews in order to identify overarching meanings set forward in the interview dialogue (Kvale, 2009).
2. The data were analyzed, using the hermeneutic circle, as described below:
 - a. The text was read and reread to determine and clarify interpretations and meaning.
 - b. Each paragraph and sentence was read and analyzed.
 - c. The whole text was reread to discover further meaning.
 - d. Notes were taken for each interview and summarized.
 - e. The summaries of each interview were read to determine existing patterns. This process is referred to as the hermeneutic circle. This type of analysis has been described as a spiral or reflexive process in which investigators seek to uncover progressively deeper levels of meaning in the text (Hoshmand, 1989; Kvale, 2009; Polkinghorne, 1984).

3. Common themes were identified at this stage and written in summary form. This process was an effort to identify the meanings articulated in the text (Jackson & Patton, 1992; Kvale, 2009). Furthermore, at this stage the primary investigator focused on emerging subthemes that were associated with and categorized under the broader common themes.
4. An experienced auditor helped validate the primary researcher's interpretations (Kvale, 2009). Once interpretations were supported by the auditor, the primary investigator worked to organize and effectively communicate the findings. It was the researcher's main intention to communicate the uncovered meaning and themes in such a way as to be true to the participants' experiences and perspectives.

Investigator Assumptions

There were several assumptions made in this study. First, it was assumed that the participants attending Gathering of Nations were representative of the educated population on the Navajo Nation. The second assumption was that participants felt comfortable enough in the interview setting to be open and frank in their comments. Third, it was assumed that the hermeneutic method of interviewing is an effective way of obtaining meaning and themes that communicate the experience of these Navajo Nation members.

Furthermore, the principal investigator recognizes that the research questions and the themes were influenced by her experience as a Blackfoot First Nation woman who graduated from post-secondary education, returned to her Nation to work, and then left again to pursue further education. It was assumed that through the hermeneutic process and the use of auditors the biases and assumptions would not harm the trustworthiness of the results.

Results

Primary themes and sub-themes were identified through the hermeneutic analysis. The review of interviews and successive readings helped identify (a) initial interpretations and meanings, leading to primary themes, and (b) further analysis, leading to deeper sub-themes. Seven primary themes were prominent concerning participants reasons for returning to the Navajo Nation. Four of the primary themes required greater clarity, utilizing additional levels of sub-themes. Primary themes included the following:

1. Family – family support and traditional upbringing
2. Community – giving back and role models
3. Cultural Identity – cultural traditions (songs, stories, customs, etc.)
4. The Simple Life – livestock, mountains, and environment
5. Reservation Economy – Networking and social circles, job availability
6. Participant Commitments to the Reservation
7. Paradoxical Suggestions

Family

Family relationships and familial connections were significant reasons for participants returning to reside on the Navajo Nation. Reasons for desiring family and familial connections varied. Continued analysis led to sub-themes of Support and Traditional Upbringing.

Support. The participants received or gave familial support in specific and identifiable ways. This theme was divided into subthemes of Family Needs, Giving Back to Family, and Role Models.

Family needs. Participants described wanting to return due to family members needing support in difficult life circumstances.

One female participant felt the need to return to help an aged relative, unable to care for herself, and a parent who was dealing with the circumstance alone:

Participant 9: My grandma's like 92. And that's the reason why. And also my mom, she's kind of like by herself and all her kids are grown up and she needs some extra help and that's why I'm there now.

The same participant, concerning the death of her father, further expressed:

Participant 9: Ah, mostly because my father passed away and my family needed me at home.

Another participant expressed similar sentiments, concerning the death of his partner's family member:

Participant 7: The reason why I ended up going back was because of the person I ended up with, because her kids were situated back in the reservation. At the same time I lost my mom. And for my grandmother, that was her only daughter, so she took it pretty hard. That kind of made my decision just to go back.

Giving back to family. Many participants spoke about their desire to offer support by giving back to their family. As they left the reservation to get greater life experience, they desired to come home and give their family members greater opportunities. Participants wanted to enrich their family's life by giving back.

One female participant indicated that she felt a need to give back because she was the oldest child:

Participant 5: Yes, definitely. The decision I made, you know, got me a job. Because I come from a large family, I was also able to help my parents. Since I'm the oldest of the family basically helping with my brothers and sisters, being there for them as well—kind

of like a second mother, having to go to their interviews for like parent teacher conference. So I would go to those types of things, athletics, up in the mountains stuff, and their studies, helping them and guiding them—things that my parents didn't necessarily know about, and so I was always constantly pushing them, as well.

Another participant was taught the importance of giving back to family, and that's why he sought to move back:

Participant 12: I grew up on the reservation. I guess a part of the way I was raised was to . . . give back to your hometown and to give back to your family and to be around them and to move back to your land.

Role models. Many of the participants spoke about offering family support by returning as role models. One female participant in particular spoke about how she was told that her brothers and sisters looked up to her.

Participant 5: Yes. I was always told growing up that my brothers and sisters are looking to me and I needed to be an example and for a long time, you know, I was doing what I needed to do—which was no problem. I took on that responsibility. And I didn't, you know, my personality is not to cause any problems or really fight too much and argue. So that's what kept me on that path.

Traditional upbringing. The theme of Traditional Upbringing was divided into subthemes that conveyed clearer reasons why participants chose to return to Navajo Nation. The analysis identified two sub-themes: Family Expectations, and Family Connection.

Family expectations. Some participants were expected to come home after they were done with school. One female participant commented:

Participant 14: I think that had to do with a lot with my family upbringing with my parents. My father was a traditional practitioner and I still had my grandparents and my great grandparents. And they always said, “This is home and you can go out and do stuff but always don’t forget your language. Always come home and there’s going to be a time when we will no longer be here and you need to carry on.” And I’ve always taken that to heart. It’s driven me all along.

Family connections. Participants noted a sense of connection to their family. One male participant wanted just to be around his family:

Participant 7: I wouldn’t say really, it was for culture; it mainly was just to be there with family, as far as family goes.

Another participant reported that he felt very close to his mother and had a desire to return to live by her:

Participant 6: I just know why I came back you know, and my biggest inspiration was my mom. She is the reason why I came back.

Another participant expressed that her family was very close and it was hard to be away from her family:

Participant 17: Well mainly because of my family. I came from like a really close, close family where my grandparents, my aunts, my uncles, my brothers, everyone was always coming back every weekend for something.

Community

Participants in the study expressed a sense of community as one purpose for returning. They both valued their community experience growing up and wanted to use their education to give back. Or they had a rough experience growing up and sought to give back in a way to

improve their community. Sub-themes within the primary theme of community include Giving Back and Positive Community Role Model.

Giving back. Many participants expressed the desire to give back to their nation in terms of returning and finding employment in industries such as teaching, athletics, or community services. They had a strong sense of desire to return to the reservation to utilize their education to help others:

Participant 2: Because I feel that, you know, a lot of our own people do not go back to our reservation once they get their degree, their education. They go elsewhere and give services, you know, outside the reservation. So I thought maybe going back to the reservation, and helping our own people will help, you know—benefit from my knowledge and skills that I have learned—and put that back to my people.

Another participant indicated that he recognized that many American Indians have a hard time living away from the reservation, because they are not well prepared, so they do not complete their postsecondary education. He wanted to go back to help youth in the community learn how to survive on their own, until they complete their degree, rather than returning before finishing:

Participant 6: The biggest influence was when I started school, I made a promise that I would go back, you know. So after I finished teaching, I wanted to coach and help the American Indian students because it's a big, big, different world out there. Coming from where I came from [town] and being you know all in one place and never travelling and going out and meeting all the other cultures and meeting all the different people and religions, it was quite a difference. And now I understand why a lot of American Indians don't survive out in the world because they are not used to it at all. When I played

[college] basketball you know I questioned my coach, “Why don’t you get native girls; they are good enough to play here,” and she told me that, “I would love to have them here but they don’t stay. They never stay. They get lonesome and homesick. We give them full ride scholarships. We give them everything they want and they won’t stay.” Which I can understand, because it is a lonely place when you are not used to living in the White world. So that was my main goal, my main promise was to come home and work with the American Indian kids and so that’s why I went back.

Similarly, another participant stated:

Participant 10: I’m where I was meant to be. I believe everything I went through has made me stronger and made me believe that everybody’s capable. That’s what I teach my students, that I have the same type of background as they do and I’m here in education or in a profession that I never thought I would be. And that they’re capable also. I can teach my students about my personal experience.

Another participant indicated that when she was younger, she would see others leave the reservation and come back, and she wanted to do the same:

Participant 11: The key issue is that when I was growing up in my community there were a lot of improvements that needed to be done. And there’re even some people that went on to college and came back, but didn’t have all the resources. And I thought I might be one of them to go off and learn as much as I can and bring a lot back to my community.

This same participant expressed a great desire to help the younger people.

Participant 11: I’m proud to be Navajo, and I want to help my Navajo people. I want to reach down to the grass roots. And I want to reach down to the young people . . . and all the way to this generation now. . . . That’s what made me to come back. Because I

explained to my younger generation that school is very important. You have to learn something and bring it back and help us.

Another participant expressed that she felt obligated to give back because she was given the Navajo Nation Scholarship:

Participant 15: Well, I feel that way because I took the Navajo Nation's scholarship money and I feel like I should do my part. I should be able to come back and give a little bit of myself back and, not in a way of money, but in a way of time.

Positive community role models. Participants desired to give back by being a positive role model for the younger generation. One female participant, in particular, indicated that she wanted to inspire kids:

Participant 13: Like I said, you know, I want to be here for the Native kids and some way, some how inspire them and even down to my own kids.

Cultural Identity

Some participants were raised in families that were traditionally based. To them, cultural identity was very important among their reasons for returning. Cultural identity was tied to songs, stories, customs, and so on. Their cultural beliefs and teachings were very important to their identity and to their children's identity. One female participant noted that the reason why she didn't want to leave the reservation was to stay connected to her traditional beliefs. These same beliefs drew her back after she completed her degree:

Participant 2: Yeah, that's where our traditional beliefs, our traditional culture—that's where—that's why we don't want to move from the reservation.

Several participants indicated similar beliefs. They expressed that they were raised traditionally and had a deep respect for their elders and their teachings:

Participant 4: Well I'm very raised traditionally and I respect my elders at the time, my paternal grandparent and also my maternal grandparents were still alive at the time. And so there's a lot of teaching—once you go off the reservation you have to know some songs, once you pass your boundaries for secret mountains. And that was how much respect I had for my elders.

Another participant connected the importance of carrying on the cultural traditions by returning to their home, to improve their homeland and to help their people:

Participant 17: We were pretty much really traditional. We grew up on traditional teachings and the majority of what we learned, or what we were brought up on, was kind of like getting taught through our elders. So pretty much that's how we were growing up. My grandpa always used to tell me that you can't just leave and forget where you came from. You have to come back. And you have to either try to make things better or try and help your people. So that's just the way I was taught.

Another participant expressed similar sentiments:

Participant 12: For me, it was my family. I'm an only child and my mom lives there. And just the way that I was raised, with the teachings that, you know, you come back to your home. And I think that's the biggest part for me—how I was raised basically.

Culture plays a significant role in the lives of some participants, causing them to return so that their children will not miss the opportunity to know their culture. Several participants conveyed the importance and sense of responsibility to pass on cultural traditions to their children.

One participant stated the importance of giving his children the culture of reservation life:

Participant 1: Because I have a lot of friends that gained degrees and live off the reservation, their children don't really understand reservation life. I raised my children on the reservation; they know what reservation life is. . . . But I just wanted them to know what it's like to be on the reservation, culture wise. It's part of our identity. It is who we are. That's why it is important.

Another participant expressed her desire to teach her child her culture:

Participant 8: So when I graduated, my idea was that I wanted to come closer to home so that I could be around my family. And I also had a desire for my daughter to know something about her culture because we were around Hispanic people all the time, but she never was around Native people. So I wanted to live close to home.

The Simple Life

Participants identified that they returned for a simpler lifestyle, outside of the city.

Participants were passionate about living a lifestyle that matched their desires to live a less complicated life than they encountered in the city.

Participants identified that they returned to raise livestock and were passionate to live that lifestyle.

Participant 12: Part of me still likes the simplicity and living the simple life, and having livestock and being around family all the time. And so I moved back and just started working on the reservation and started a career there.

Participant 17: Mainly my love for livestock. I mean I lived in . . . for almost a year, and I couldn't do it without having some kind of responsibility of livestock. So I had to go back and eventually just started taking care of my horses again.

Another participant indicated that they also returned to raise livestock, but added another reason for returning was to have the lifestyle of rodeo, which was difficult living in a city.

Participant 2: Yeah, so my kids are into lifestyle; they're into rodeo. So if we move to city there's nowhere to put our cows and horses and all that.

Another participant tied lifestyle to living in the mountains. She couldn't place her finger on exactly what drew her back, but her love of the mountains kept her on the Navajo Nation:

Participant 5: Oh, yeah definitely. I love the Navajo Nation that was something that I already knew I was going to do, right getting out of the college. [College] didn't necessarily have anything, a career set for me or anything like that. So I just kind of went home. But since I love [town] and like I said the mountains and it's so cool up there, I wanted to stay on the Navajo Nation.

Reservation Economy

Many participants indirectly identified the reservation economy as a motivating factor for returning to the Navajo Nation. Within that broader theme, the analysis identified Job Availability and Networking/Social Circles as secondary themes.

Job availability. One female participant came back because there was work for her in her field of employment. She noted that having a job that fit the reservation economy provided great security for her.

Participant 3: They called me because I was a nurse. It's like I told my kids; I feel really bad because I got into nursing and at that time it was like a need, so I never had any problems getting a job, never. I mean I was unemployed maybe about a month and that's about it.

Networking/social circles. Participants indirectly identified that successful integration in reservation economy had a lot to do with whom you knew, and who your family was. One participant female directly identified that they returned to utilize this advantage. In the first instance, the participant indicates a relative's connections in the community as beneficial to them getting a job, even though the subject was not well known.

Participant 5: My grandpa knew a lot of people. A lot of people knew him as a rancher, farmer, and he was a code talker. He had a lot of contacts. Even today I'm able to use those contacts and help. Like I said he was a rancher. . . . I'm able to work some work for them. I'm going to see if I can do some volunteer work and maybe that will transition into writing some grants. Now that I'm making contacts, I'm able to actually write some reports for people, technical reports that they need. So there's some money slowly flowing in.

This same participant, in the second instance, indicated utilizing a hunting buddy of their father's, employed in a government position, to quickly get employment, and move up in rank.

Participant 5: After I graduated . . . I actually was recommended by my father's friend who we used to go hunting with all the time. He worked at the [government agency] and mentioned to my dad the [government agency] was looking to hire a [specific profession]. And so . . . put in my application and within two weeks I had a job with [government agency] as a [specific occupation]. And from there I moved up to [specific occupation].

Commitment to the Reservation

Participants expressed obstacles many encounter when returning to the reservation, which they were able to overcome because of their deep commitment to return. When participants were

asked to make suggestions about how they think the tribe could encourage college graduates to return to the reservation, there was no hesitation in their responses. This indicated that these topics were already on their minds before they were even considered candidates for this study. The participants recommended that the Navajo government make improvements in the areas of employment, housing, and conveniences.

Employment. Within the sub-theme Employment, participants suggested the following areas of improvement: Hiring Systems, Wages, Job Availability, and Future Career Growth. These topics are described in the following sections.

Hiring systems. Participants implied an inconsistency in the hiring process as a place for improvement. Participants stated that some are hired simply because of whom they know, others implied the presence of nepotism, and yet others identified a problem with utilizing a non-native work force.

Participant 13: It just kind of depends what kind of degree you got, and yeah there are a lot of limitations. But yeah there are a lot of barriers, and I guess you just need to know the right people and be in the right place in order to get a job on the reservation.

A couple participants also indicated that finding a job depends on your connections and who you know.

Participant 3: Um, because of the traveling and the distance I think the job that he has it's like it's sustainable for him. He tried traveling back and forth but the kind of job that he has, there's no way he's going to find that kind of a job on the reservation and a lot of it has to do with what I call lateral [indiscernible]. You know you go in and apply for a job and how you look and whom you're related to and how . . . I mean there's been jobs where you can apply for and if you belong to a certain family they won't hire you.

Participant 5: Start early. There are a lot of connections you can make with people that have been in that similar situation. Use your relatives, your connections. In the native world there's no such thing as seven degrees of separation. There's one or two. So you're always able to find someone somewhere, someway, somehow.

Participant 13: Well one of the key issues—you know how they say Navajo preferences? It would have been nice if they'd keep it like that, instead of bringing in all these Anglos. And I know with the school system we have a lot of Teachers for America, and I think that's really inappropriate because they didn't go to school, it's just like an on-the-job training type of deal. And yeah there are a lot of coming in from different places and that's why there's a lack of jobs for the people that really went to school, that got the degree you know.

Wages. A common topic of recommended improvement was the increase of wages.

Participants identified low wages as a reason why many educated Navajos don't return. They link the role of tribal government with low wages paid.

Participant 2: I think it's the tribe itself; they need to look into—nowadays it's money. It's a money-making thing, you know, to support a family and everything. So I think that the Navajo Nation needs to up their salary wages for a lot of these people that have degrees to come back to our reservation and to get these jobs. But on the Navajo reservation, Navajo preference should be the number one; they should consider that has to be number one for employment.

Participant 11: I travel a lot in my job and I find a lot of these highly qualified Navajo people out there working in the world. And they express they're coming back, but they express also that the pay is not there on the reservation. But definitely it's all coming

back to our government. It's our own fault, too. If we really want our kids back, then do something and improve a lot of things in our government.

Job availability. Participants expressed a lack of job availability on the reservation.

Participants assume that as the tribe provides more jobs, more educated Navajos will return.

Participant 13: The recommendation I would make is provide more jobs and maybe provide more houses you know; just pretty much provide more stuff for the Navajo people to come back instead of leaving the reservation. I guess basically just helping them out with their scholarships like that, so they can proceed even more with their education.

Participant 15: I noticed that a lot of kids, a lot of students have graduated, but there's no job for them, so they stay in town or they go to [large city]. There's a classmate that I had. She's an engineer and she went to [large city] and got a job out there and hasn't returned. I mean she comes once in a while, but she's not here anymore. That makes me sad to see our own people go off like that and not have to be here anymore because of jobs.

Future career growth. Participants said a significant reason that many do not return is the lack of career growth opportunities on the reservation. One participant recommended the tribe make arrangements to promote greater career growth for returning educated Navajos by only offering scholarships strategically aligned with reservation needs.

Participant 11: I think it all starts from the scholarship. To me, I think the scholarships should list some career titles—what I'm trying to say is do what the China people do.

They tell you, you're going into social work. So, the money's there for social work.

You're going to go into engineering; the money's there for engineering. Something like

that should be set up for the Navajo scholarship in this case. It's not people just want to have that money and they just go off to and want to be whatever they want to please.

Other participants recommend that youth find a way to observe what career they want to do in the future, on the reservation, and then choose a degree that naturally fits that availability, thus promoting future career growth within Navajo Nation. Both of these participants' suggestions rely upon a proactive approach of the Navajo citizens to consciously choose careers that grow with the reservation, as a means of career growth security.

Participant 12: I really think that a lot of students from high school should make a decision on what they want to do in their future careers to do for their future careers or their future lives. And that's what I did you know—observe what I wanted to do when I was younger and I observed what kind of jobs they have on the reservation and what there is a demand for and how I could be a part of the network on the reservation rather than finding something that isn't made available to you on the reservation.

Participant 12: I think a lot of people I know choose careers that are not available on the reservation. They choose careers that are only available in the city, you know places like that. And I think it would have been nice if they would choose something that would benefit them and benefit the people of the Navajo Nation, as well.

Housing. Some participants returned because they qualified for housing, but recognized that there is a shortage in housing and that housing policies favor low-income candidates. They recognized that their peers would return if housing were made available, but since it isn't, they continue to reside in the city. These participants recommend that tribal government provide housing so people can return.

Participant 1: You know what, it was hard to find a job on the reservation. It's tough even for those who want to do, which I wanted to do. You have to find a place that will hire you. It's really hard to find a good place to live on the reservation—that's nice, some places you want to raise a family. I was lucky with the place I got hired because housing was part of the employment. If you are low income you can find a place easy, if you are not, guess what. If they are going to require that, they need to make accommodations for people to live, not just low income

Participant 5: I was in one of those little cubbyholes, studio apartments. It was good. It was really exciting. I applied at NHA, checked on their prices—but it was very high—and being a single person, you don't want a three-bedroom home for yourself. It's not very good. But I eventually did move to [place] and got me an apartment over there. So the issue for me was just, where am I going to live?

Participant 5: I have a cousin that's an architect. I have a cousin that's a pharmacist. But they all left. They didn't come back but they're needed. They want to but there are really no housing opportunities as far as ownership—being able to go through that whole process. So they're living comfortably in the city. Big house, you know, nice car. They could come back with their knowledge that they've gained and really do some good.

Participant 13: The recommendation I would make is provide more jobs and maybe provide more houses you know, pretty much provide more stuff for the Navajo people to come back instead of leaving the reservation.

Convenience. Participants expressed their opinion that reservation life did not provide the conveniences of the city lifestyle. They recommend that the tribe provide conveniences similar to that of the city.

Participant 1: I have one friend who is a doctor and one who is a lawyer, and they chose to live off the reservation. So that was their choice, they are happy and productive people, but its not easy to live on the reservation; you give up a lot of the conveniences.

Paradoxical Suggestions

Participants were very clear that it was constant, lengthy, meaningful contact in significant relationships that made it desirable and possible for them to overcome obstacles to return to live on the reservation. However, when they were asked what they would suggest would bring more educated Navajos back to reside on the Navajo Nation, the bulk of their suggestions were some form of government programming. Participants said relationships were what drew them back, but recommended government programming as the solution to bring others back. Governmental programming suggestions that participants recommended are already stated above. They include: employment, hiring, wages, jobs, career growth, housing, and conveniences. This posed a paradox that caused the primary investigator to reflect upon her previous experience.

Primary Investigator's Insights

The primary investigator was raised on the Siksika Nation (Blackfoot), which is located in Alberta, Canada. Like the participants in this study, she too left the reservation to seek further education, had a desire to return when complete, and then successfully returned. She sought election to the Siksika Nation Chief and Council, thinking to make significant changes through implementing government policies. She was elected and served for several years, but by the end of her term she was frustrated and decided not to run again. She discovered that the political process was slow and difficult. It would take years to implement the policies she had proposed

because the final decision was in the hands of an overseer for the Canadian government, who had no motivation for making such changes.

Despite her experience on Siksika Nation Chief and Council, the primary investigator initially identified with participants' suggestions of government policy changes. She remembered a time when she thought that tribal administration could solve the tribe's problems as well. Although, in retrospect, her reasons for returning to her reservation were clearly motivated and supported by relationships, she too found herself seeking solutions through government programming. However, her experience trying to overcome bureaucracy, an overseer, and a federal government proved highly unsuccessful. So, it was surprising that despite having lived the very paradox she ultimately found in the participants, it still took considerable analysis and reflection to identify the paradox.

Discussion

There has been little research on the brain drain on American Indian Nations. Even less research has been done concerning the question of how to stop the brain drain effect for these Nations. The purpose of this research was to obtain the perspective of college educated Navajo tribal members, who returned to reside on the reservation after obtaining their education, in order to discover what motivated them to do so. Prominent themes were (a) Family, (b) Community, (c) Cultural Identity, (d) the Simple Life, and (e) Reservation Economy. In considering these prominent themes, previous studies, and her personal experience living on the reservation, we found that relationships were the most important reason for coming back; whether the relationships were tied to family, community, culture, simple life, or reservation economy, and that, as was found in McKenzie et al. (2013), such relationships are cultivated through constant, lengthy, and meaningful contact.

The strength of participants' relationships varied from participant to participant. However, like McKenzie et al. (2013), our analysis found that relationships motivating participants to return were created through constant, lengthy, and meaningful contact. The themes, sub-themes, and sub-topics discussed in the findings lend themselves to identifying different areas in the lives of each participant where they have developed these kinds of relationships. For example, a participant expressed having consistent experience with family and cultural traditions growing up. Their family participated in traditions of songs, stories, and sacred mountains regularly. Such experiences were frequently repeated year after year, over a long period of time, becoming integrated into their self-identity. Thus the participant identified family and cultural traditions as the motivating factor for returning to the reservation after getting their education.

Other studies show that, to the Navajo, identity and relationships are developed from gestation, when the individual's clan is announced, and in different ceremonies throughout their life. Ceremonies are the tools used to teach the individual that they are unique and special to the family, community, environment, and spirits (White, 1998). When relationships are deeply rooted and based on constant, lengthy, and meaningful contact, Navajos who leave the reservation, seeking further education, are willing to go to extreme lengths to regularly return and maintain such relationships. A participant in the study of McKenzie et al. (2013) reported that, even though he lived off the reservation, he would drive five hours each way at least twice a month to visit his parents and return for ceremonies and family events. Participants from the same study also indicated that connections to culture and reservation life acted as a sort of magnet, constantly on their minds, pulling them to return. One participant indicated that they

wanted their children to learn their culture. Another expressed a deep connection to the reservation, indicating that there is no other place like it in the world.

According to McKenzie et al. (2013), participants unable to permanently return to the reservation often were able to preserve their self-identity, while away at school, even after being integrated into the dominant society, using cultural practices and the aid of other cultural tools. Haskie (2002) developed a grounded theory, which proposes that individuals from different cultures and backgrounds can preserve the foundation of their culture even though they integrate into the dominant society. She stated:

In order to survive the integration with a dominant culture, the secondary culture must meet certain conditions. When these conditions are met, people successfully preserve their culture. These conditions include practicing Hozho doo K'é, becoming educated, utilizing tools (products of preservation, such as customs that have been recorded on tape and in books), practicing leadership, changing, and adapting (p. 81).

Even when tribal members leave the reservation, those with strong relationships back home continue to seek ways to maintain constant, lengthy, and meaningful contact, even when it wasn't easily available. Maintaining previously cultivated relationships produced a greater ability for participants to stay focused on returning once they completed their education. Lee (2006) reported that Navajos believe that it is important to know who your relatives are and how each human being is connected with all relations on earth and in the universe. The participants of this study reported that these strong and enduring cultural ties were responsible for cultivating Navajo self-identity. And we found in this study, that such a self-identity, tied to the reservation, promotes return.

The principal investigator was raised a member of the Blackfoot Nation, a First Nation's North America/Canada tribe. She, like other participants, had a traditional upbringing through tribal songs, dances, stories and ceremonies but left the reservation seeking higher education and returned to reside on the reservation to serve in tribal political office, as a member of Chief and Council. Throughout the study, the themes that have emerged in this and other research concerning the Navajo Nation's brain drain, surprisingly mirrored many of her own experiences as a member the Blackfoot Nation.

The principal investigator's experience as a political leader in Chief and Council helped her recognize an underlying paradox in the participants suggestions about how to increase the number of people returning to the reservation. When asked if participants could offer recommendations that would promote educated Navajos to return, their responses implicated tribal politics in the solution. Participants suggested that if the tribe could offer better jobs, housing, or other conveniences, more educated Navajos would return. However, the political experience of the principal investigator suggests that governmental programs are short-term solutions and do little to mitigate the barriers to economic success and political agency.

When the principal investigator won a position in Chief and Council on her nation; it was her turn to make a difference. Initially, familiarizing her with governmental processes proved challenging. In her efforts to be creative, however, she found her hands tied, unable to productively direct her tribe's affairs. Further investigation revealed temporary government programs perpetuating barriers rather than removing them. For example, her research revealed federal tax distributions valued First Nation members as 25% less per-capita than non-First Nation members. Calculations revealed that on-reservation public programs were significantly underfunded but held to the same expectations as off-reservation programs. Monies that filter

through to the tribe were distributed through highly regulated channels, leaving very little room for tribal leaders to use creatively on progressive projects of their own design. As a last effort, at the end of her term, the principal investigator traveled to the Federal Government of Canada to make her case, only to discover even more bureaucratic processes impeding change. She concluded that seeking solutions through tribal politics and government policies does little to mitigate the economic barriers, and in some ways these policies can hinder constant, lengthy, and meaningful contact, weakening relationships, resisting a returning educated population, and perpetuating the brain drain. Rather than approaching the problem by focusing on government policy solutions, we see value in a relationship-focused approach, an approach that utilizes constant, lengthy, and meaningful contact as its foundational emphasis.

Implications

This study explored an important aspect of the Navajo experience in order to uncover why educated Navajos chose to return to reside on the reservation. We anticipate that our findings will inform the Navajo Nation's efforts to produce a brain gain, by suggesting ways in which tribal policy makers may create an environment to strengthen relationships through constant, lengthy, and meaningful contact. This study also has implications beneficial to other indigenous nations and communities that suffer a similar loss of educated human capital.

We see a need for a two-pronged approach. While short-term needs must be fulfilled, we believe a long-term vision will produce greater stability and growth, promoting stronger relationships. First, the author's experience suggests a long-term nation-building approach holds the greatest promise. A nation-building approach is consistent with the findings of Cornell and Kalt (2006). They stated:

We have called this the “nation-building” approach, thanks to its dual focus—conscious or unconscious—on asserting tribal sovereignty and building the foundational, institutional capacity to exercise sovereignty effectively, thereby providing a positive environment for sustained economic development. (p. 11)

Cornell and Kalt (2006) suggest the foundation of such an environment is based upon five attributes, which can be easily customized to a specific tribe’s cultural values. They are (a) real sovereignty: in which self-governance places the development agenda in American Indian hands and decisions and consequences work together to produce efficiency; (b) effective governing institutions: a fixed constitution in which the American Indians agree upon the “rules of the game”; (c) cultural match: in which the rules of the game are Navajo rules, based on Navajo values; (d) strategic compass: a plan of strategy that resists quick fixes in exchange for long-term visionary rewards; and (e) nation-building leadership: a system of leadership, that is not primarily focused on redistributing government funds, rather, a model based on efficiency and success, both in politics and within the community. A strategic long-term approach fashioned in this manner holds promise of a positive environment and a sturdy foundation upon which economic growth, cultural preservation, and deep relationships can be built.

A new mentality, free of the hegemony of colonial regulatory ideals, with an emphasis on bringing the political battle to a familiar terrain, in which decision making is done on the reservation, for the reservation, and by the reservation, would be a mindset that would place the reservation both in control of their destiny and hold them fully accountable for their decisions. Rather than waiting on the lengthy processes of bureaucracy tied to government latency, tribal leaders who made the decisions can be held accountable for the choices they have implemented. Accountability on the part of tribal leadership would produce a strategy involving the input of

the nation, if a tribal leader would be re-elected. Thus tying the choices of tribal leaders with the ideals of tribal members, making both leaders and members directly accountable for all decisions made. Accountability would necessitate better communication on the reservation and require that nation members increase awareness of how the mechanisms work and their role in the matter. This would restore the tribe's reliance upon their constant, lengthy, and meaningful contact in which survival and future is wholly based on the strength of their relationships. Changing the nation's approach to an emphasis on constant, lengthy, meaningful relationships will affect the mindset of the people. This approach would align with what naturally draws Navajos to return and would produce an even greater attraction for future educated Navajos to return.

For the second aspect of a two-pronged approach, in the short-term, policy makers might find a higher yield on their investment in an educated human capital by awarding more scholarships to students studying in fields that align with long-term tribal growth. Converging the growth of the nation with the growth of its citizens encourages hope for a returning educated population and greater economic stability.

Also, prioritized scholarships have the potential to improve return on investment in an educated human capital by fitting current tribal needs with available skilled human capital. However, without the foundation of the long-term strategic thinking outlined above, even policies such as these may have no impact or even contribute to further brain drain.

Limitations

As with any study, limitations were inevitable at the outset. One limitation of the study could be the location of the interviews. The location of the interviews may not have been conducive to allowing the participants to be completely honest. Participants may have restricted

their responses due to the lack of privacy, as the interviews were conducted in an open environment with many individuals passing by where the interviews were conducted.

A second limitation is the pool from which participants were drawn, a cultural gathering in Albuquerque, New Mexico. The study made the assumption that those attending this cultural gathering were a good representation of college-educated Navajos who returned to live on the reservation. However, the opinions of participants in the findings may not represent the opinions of the Navajo population as a whole. Perhaps less social, or less politically involved individuals on the reservation would have had different perspectives and reasons for returning.

A third limitation may be the bias of the interviewers. Much was done in the study to design questions and a method to allow participants to express their ideas freely. Likewise, the hermeneutic method is aimed at articulating and exposing bias. However, interviewers came from different disciplines, which, when clarification was necessary, produced a tendency to ask questions based in their own assumptions. This may have distorted some of the interviews.

A fourth limitation may be the bias of the principal investigator. As the principal investigator's experiences of reservation life can produce valuable insight from an insider's point of view into the conundrum, such a perspective may be accompanied by bias. Maintaining a disciplined approach to discovering the participants' meaning and constructing coherent themes in this study was the method used by the principal investigator. However, participants' experiences could only be observed and constructed through the filter of the principal investigators experiences.

Recommendations for Future Research

Throughout the study, we recognized a strong tie between the tribe, on a macro-scale, and individual families, on a micro-scale. Participants suggested that relationships were the main

factor for returning to the reservation. Family relationships were most mentioned. Further research that explores and identifies the principles and teachings that were taught in the families of returners may be beneficial to identify the reasons why individuals have a desire to return. A study on the impact of the brain drain, on the micro-scale of a family, juxtaposed on the findings of the brain drain effect on the tribe, may give future investigators even more fine-tuned insights and solutions. This study suggests a relationship approach to tribal governance. A study on families who have a high rate of returning members versus families with a low rate of return may also provide new insights. Such a study would require a method that allows for a sustained relationship between investigators and participants to get a deeper, more personal view into the matter.

A collaborative study done by indigenous investigators and non-American Indians investigators may uncover greater detail to the cause of brain drain. An outsider's view and an insider's view, together, can produce a better view of the whole situation, providing better recommendations and a greater justification for implementing recommendations. We suggest that if a relationship-based approach would produce greater brain gain on the reservation, then it might also prove productive in the investigative work aimed at uncovering solutions. Such a collaborative approach would benefit the accuracy of understanding of the non-American Indians investigators on the true difficulties of the reservation and can provide a greater sophisticated approach to American Indians on the reservation by uncovering truths that may have been missed by the bias of those originating from the reservation. Future research might benefit from access to archival interviews as another means of collaboration.

Supporting tribes in performing their own studies would also help to customize future brain drain recommendations. While a comparative approach, as suggested above, would

strengthen a collaborative effort in uncovering truths concerning brain drain, helping tribes to conduct their own studies would possibly give them the ability to make their own recommendations to improve their own self-governance.

Conclusion

For decades, developed economies have been able to recruit the brightest educated Navajos, while the Navajo Nation has born the educational financial burdens and realized little of its benefits. Since 1863 Navajos lost their autonomy and fell into political subjugation. Navajo Nation is highly influenced by the methods of the federal government, which has perpetuated the Trail of Tears into our current day (Ruffing, 1979).

Tribal sovereignty has gradually evolved. Sovereignty is slowly returning agency to American Indian people to direct their own future, but not fast enough (Cornell & Kalt, 2006). The price of the Navajo diaspora exceeds any calculation in dollars lost, even considering the effects on quality of life of Navajo Nation residents and their limited potential for future economic prosperity. Despite these losses, the persistence and resilience of members of the Navajo Nation is evident in this study.

The experiences shared by participants of this study, echo a call from the past for fundamental Navajo values to return to the Navajo Nation. As reasons for their return after getting their education, participants expressed the magnetic draw through one or more themes of Family, Community, Cultural Identity, the Simple Life, or Reservation Economy. The overarching theme for returning Navajos was relationships built on constant, lengthy, meaningful contact. Given this, the degree to which the Navajo Nation can cultivate relationships built on constant, lengthy, meaningful contact is the degree to which the Navajo Nation will experience brain gain.

However, in order to create an environment that will cultivate constant, lengthy, meaningful contact, we recommend a renovation in response to the subjugation of a foreign government. We recommend the foreign foundation be replaced by a two-pronged approach toward self-governance (Cornell & Kalt, 2006). From the beginning, Navajo values have stood in contrast to the purposes of the colonizing government's principles. The colonizer's government principles have created a harsh environment that negatively impacts Navajo relationships. However, uprooting the foundation of colonizing government policies, and replacing them with a sovereign nation-building approach (Cornell & Kalt, 2006), will perpetuate the return of educated members to the Navajo Nation. This study will have implications beneficial to other indigenous nations and communities that have suffered a similar loss of an educated human capital.

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APPENDIX A: REVIEW OF LITERATURE

This review will be divided into three sections. Section one will discuss the literature that suggests a direct correlation between education and economic growth. Section two will examine the phenomenon called brain drain (Berry & Haklev, 2005). Section three will discuss literature found on both American Indians in general and Navajo tribal members in particular, in regards to the brain drain.

Education Correlated to Economic Growth

Available research suggested that education is a key factor in reducing poverty, improving economic growth, and promoting safety. In a developing economy, it is the knowledge obtained by its members that has the capacity to enhance people's lives. The absence of such knowledge allows for poverty, disease, and death (Berry & Haklev, 2005). Lucas (1988) suggested that education is a major determinant of long-term economic growth (as cited in Beine, Docquier & Rapoport., 2003). Education reduces poverty and develops the economic momentum necessary to enhance the lives of its citizens, thus promoting wealth. Kiyosaki (2009) wrote, "Knowledge is the new money, and our minds are our greatest God-given asset" (p. 244).

Education is not only the foundation upon which a developed economy builds; it is the very fabric of the entire economy that becomes its competitive advantage. As UNESCO (2000) stated:

Education has moved from being the floor on which a country builds its competitive success to being its competitive success... The single most important question is now: How smart are your people? Knowledge does not respect geography or old economies. Ideas have wings, and in the information technology age they fly at the speed of light (p. 15).

A better-educated population correlates with economic growth as a poorly educated population correlates with economic decline (Docquier, 2006). Improvement in education turns into rising income and access to resources, which leads to longer life expectancy, lower fertility, urbanization, and increased education (Fox & Pope, 2007). As developed economies increase their educated population, incomes and work conditions improve. For example, in the founding years (1900) of the U.S. formal education system, there were only 14 colleges, graduating 170 students every year, which was less than 1% of the population at the time (Fox & Pope, 2007). By the year 2001 the U.S. had more than 300 times (4,200) more institutions and enrolled about 16.4 million students and about fifty percent of all high school graduates attended college. Higher incomes and white-collar occupations were increasingly associated with college degrees. Higher incomes also correlated with safer work environments (Berry & Haklev, 2005). Higher incomes, job availability, and safer work conditions were indicators of economic growth that enhanced lives, reduced the risk of disease and death.

In contrast to the growing economy around them, most American Indian tribes struggle to stabilize their economies. Hoffman, Jackson, and Smith (2005) suggested that American Indians have the lowest educational attainment compared to other ethnic and cultural groups and they have the highest rates of poverty and lowest standards of living of any ethnic or cultural group in the United States.

Developing nations, such as American Indian tribes, are in constant battle, at great cost, to provide their citizens with higher education in hopes of overcoming their struggling economies and producing a higher quality of life for their citizens (Berry & Haklev, 2005). However, despite their individual and collective sacrifice and financial efforts, developing nations are failing to convince their graduates to return and participate in growing their American

Indian economic objectives (Gibson & McKenzie, 2011). This phenomenon is called *brain drain*.

Brain Drain

The brain drain is the process of having highly skilled and educated workers leave their native homelands in order to seek more promising opportunities elsewhere (Kwok & Leland, 1982). Brain drain is also sometimes referred to as skilled migration or diaspora (Gibson & McKenzie, 2011). According to economic models, the more skilled or highly educated a person is, the more value that person holds to be bought or sold (Iredale, 1999). These migrations occur due to push or pull factors. A good example used to explain the concept of the brain drain came from an article written in *The Economist* (2005). The authors likened brain drain to a wealthy-country soccer team who recruited players from a poor country, even though the poor country had a team of its own. Since the poor country couldn't compete against the salaries offered by the wealthy country, the wealthy country drains the talent from the poor country. This was an obvious talent drain. Though sometimes less obvious, a brain drain occurs when doctors, teachers, and engineers are recruited away from developing countries or communities to more lucrative job markets in more economically developed areas.

Brain drain can occur in different degrees depending on skill level. Guha (1977) suggested skill levels were categorized as follows: unskilled, semi-skilled, and skilled. Guha's categories referred to types of work respectively, migrant work, blue-collar work, and white-collar work. Likewise, Beine, et al., (2003) used education categorizations as follows: primary, secondary, and tertiary. The highest educated work types include engineers, doctors, business administrators, etc. In both models the overall tendency for migration rates are much higher for the highest skilled/educated individuals (Beine, et al., 2003; Guha, 1977). The highest skilled

individuals continued to drain out of sending countries and into receiving countries, leaving sending countries struggling to forward economic objectives (Ahmad, 2004). Todaro (1996) expressed this point:

The irony of international migration today is that . . . many of the people who migrate legally from poor to richer lands are the very ones that Third World countries can least afford to lose: the highly educated and skilled. Since the great majority of these migrants move on a permanent basis, this perverse brain drain not only represents a loss of valuable human resources but also could prove to be a serious constraint on the future economic progress of Third World nations. (p. 119)

Receiving countries reap the benefits without consideration of the harm being done to sending countries (Docquier, 2006). For example, Ahmad (2004) stated that Germany aggressively targeted the best minds of developing countries to positively impact their own economy. Little was done to compensate sending countries for the loss of human capital (Docquier, 2006).

Kupfer et al. (2004) found that individuals choose to emigrate for different reasons. Some emigrate because of safety, political unrest, discrimination, and economic necessity (push factors), and others emigrate because of professional opportunities, conveniences, and earning potential (pull factors). Berry and Haklev (2005) indicated that push factors repel students from their native countries and pull factors attract students to host countries. Push factors within the sending country, or country of origin, motivated skilled or educated individuals to leave (Dovlo, 2003; Zweig, 1997). Push factors could include lack of employment opportunities, lower comparative salaries, and political unrest and instability (Gibson & McKenzie, 2011; Kupfer et al., 2004; Kwok & Leland, 1982). Most American Indian tribes have inherent organizational challenges that seem to continually cause political instability, thus creating push factors that

repel educated tribal members from returning to permanently work on the reservation. Cornell and Kalt (2000) stated that all tribes were essentially designed to fail because every decision made by tribal authority was non-strategic, reactionary, and controlled by an outside governing force. The results of such political traps include separation of wealth, heightened poverty, and a stunted economy that generate economic unrest.

Pull factors are deliberate or unintended benefits that attracted skilled or educated individuals away from sending countries into receiving economies (Dovlo, 2003). Common examples of pull factors can be quite varied. They include significant increases in annual income, comfortable living conditions and lifestyles, opportunities for career advancement, better working facilities, education and safety for families, and opportunities to learn from skilled mentors (Gibson & McKenzie, 2011; Zweig, 1997). Berry and Haklev (2005) pointed out that there were more Ethiopian doctors in Chicago than there were in Ethiopia and that 10% of all Canadian doctors were from South Africa. Such health professionals migrated because they could work in better health facilities with access to better tools and get paid more—pull factors that were very difficult for developing countries to compete with.

Developed economies have significant recruiting advantages over developing economies. Financial institutions, educational institutions, infrastructure, and conveniences are the source of fundamental pull factors (Bollard et al., 2009; Gibson & McKenzie, 2011). Most developing countries have little access to financial institutions, while developed countries have multiple financial institutions from which capital easily flows (Gibson & McKenzie, 2011). Many developing economies struggle to develop educational institutions and depend solely upon primary and secondary education to progress economic objectives (Beine et al., 2003), while developed countries have more tertiary education institutions (Fox & Pope, 2007). Skilled

individuals who desired to maximize returns traveled the world in search of the highest paid opportunity or the best living conditions (Iredale, 1999). Such individuals, according to Iredale (1999), chose a location “where they feel they will be better able to use their capabilities and enjoy superior conditions of work and existence” (p. 90).

Another recruiting advantage for developed economies is that immigrants are usually educated within the developed economy (Kwok & Leland, 1982). Recruiters can make an accurate assessment of a student’s talent from first-hand experience. This gives developed recruiters a better understanding of what a student is worth, avoiding undervaluing or overpaying them. However, recruiters from the native country or community do not have as much affiliation with college-educated students and fail to accurately value graduates. They fail to offer salaries based on true productivity. These pull factors give developed economies the upper hand and increase the amount of brain drain from developing economies.

Brain drain from developing nations can arguably be seen in a positive light (Docquier, 2006). Skilled emigrants can potentially become contacts for native homeland counterparts for entry into new foreign markets, thus expanding economic development and foreign market exposure. Emigrants can be seen by their native counterparts as a contact to distribute native goods in foreign lands. Greater goods distribution introduces new money into their native homeland economy. Also educated emigrants can be seen as role models for people in their native homeland (Gibson & McKenzie, 2011). As the most educated are recruited away from developing economies into developed countries, they have access to a more comfortable lifestyle. Those remaining in sending countries strive to obtain the same for themselves. The result is an increase in the education of the developing countries as a whole, even though many of those who are educated do not leave (Docquier, 2006). In addition, developing countries

increase incentives for their native people to become educated. The countries that benefit from emigration were described by Beine et al. (2003) as countries with low migration rates (below 20%) and low human capital levels (below 5%). Furthermore, Docquier (2006) stated emigration could be positive for developing countries for the following reasons:

1. Remittances (money sent home) are a major source of income for developing countries.
2. Remittances occur as skilled emigrants send money back to their native homelands.
3. In 2005, 175 billion U.S. dollars were remitted to developing countries, as reported in the most recent *Global Economic Prospects of the World Bank* (2006).
4. Remittances flow from developed economies into native homelands, stimulating their economy and providing wealth.

A negative side of brain drain is that smaller developing nations expend capital resources to educate their citizens, but they don't realize a return in economic growth. Skilled emigrants are recruited away, leaving the task of economic development in less capable hands. Secondary to the loss of human capital is the loss of financial capital. Portes (1976) suggested that developing countries contributed millions of dollars educating their citizens only to have them emigrate.

The Navajo Nation has also subsidized the development of U.S. professional personnel by contributing millions of dollars toward educating their nation's members. Tribal members become educated but don't return to the reservation (The Office of Navajo Nation Scholarships and Financial Assistance, 2011).

Navajo Nation Brain Drain

The brain drain has been examined in many third world countries, but very little has been done to study the effects of brain drain with respect to the Navajo Nation. The following review draws from related articles found on both American Indians in general and Navajo tribal members in particular.

Government regulation is a push factor among American Indians. Cornell and Kalt (2006) cite tribal government overregulation as a cause for American Indian brain drain. Reservation economies are highly dependent upon federal dollars and subject to decision-making policies that undermine tribal sovereignty. This research suggests that the federal government provides American Indian tribes with funding, filtered through their regulations. Tribal leaders must adhere to federal regulations. Leaders are heavily restricted on the use of federal monies, and can do little to promote creative investments of their own designs. Since the use of federal monies is the largest source of income for the reservation, tribal leaders occupy most of their time maintaining bureaucratic compliance, accomplishing little strategically, while failing to mitigate problems. Thus tribal leaders have no strategic value to the tribe and are only seen as a distributor of federal resources. Specifically Cornell and Kalt (2006) stated:

There's a brain drain as a lot of the people with good ideas—particularly younger tribal members—leave home for somewhere else, desperate to support their families and discouraged by political favoritism, bureaucratic hassles, and the inability of tribal government to deal with the basic problems. Patterns of failure, mismanagement, and corruption encourage outside perceptions of Indian incompetence and reservation chaos. (p. 10)

The result of this overregulation is that tribal leaders are reduced to mere distributors of federal financial resources and therefore are chosen only by popular vote based on special

interests, not by their ability to improve financial economic conditions. Tribal politics naturally become mired in micromanagement, favoritism, unequal separation of wealth, and a stunted or declining economy. Political instability is the end product and is considered a significant push factor to potential returning skilled migrants (Cornell & Kalt, 2000).

Another study done among American Indians, concerning academic persistence, indirectly identified some push factors. Jackson et al. (2003) quoted one research participant who explained that he cut his ties to the reservation to maintain his personal success. Cutting ties to the reservation was done when the students' "connections to home and community were largely negative or painful" (p. 559). This participant, when asked if he currently felt connected to his homeland, responded:

"No, not really. I stay away from it because of all the problems they have on the [reservation]. You know, alcoholism. Alcoholism is pretty bad. I got into that after high school in like 11th or 12th grade. . . . It was a lot easier, I found out, just to move away from the problems. . . . Murder, suicide rate, yeah, it's pretty high. I had two [relatives]; they committed suicide." (p. 559)

The same participant, when asked about his future plans, said:

"I might be going back to the [reservation], yeah, to help the community out, but not live on the [reservation]." (p. 560)

Another interviewed participant expressed concerns of deciding which community to fit into when contemplating their vocation as follows:

"I want to work on the reservation, that's what I want. But there really aren't many jobs available for [my field]. They're barely getting there. I saw one advertisement for a [job in my field]. I was like, 'Oh my God, they have my . . . I hope it's still available when I

graduate.’ But if they don’t really have anything, I guess I could say I’ll have to move to a big town or city, [where] I’ve seen a lot of job openings. . . . But I want to work where I live.”

The participants interviewed in this study felt a considerable need to leave their reservations, attend college, and obtain a prestigious occupation; but if they did leave, then they didn’t maintain their tribal identity and are therefore considered a “sellout” by some (p. 560).

Another study that included a team of investigators that consisted of members of the Diné Policy Institute and faculty and graduate students from Brigham Young University (BYU) conducted unstructured one-on-one qualitative interviews to understand the decision of Navajo Nation residents to live away from the Navajo Nation after completing their college education (McKenzie et al., 2013). Interviewed participants provided personal accounts of why they failed to return to the reservation once educated. After reviewing the interviews common themes emerged. The four emerging themes were family, cultural, and tribal relationships; lifestyle; infrastructure, services and tribal operational systems; and opportunities.

Of the four themes discussed in McKenzie et al. (2013), only the first theme (family, cultural, and tribal relationships) had both push and pull factors. A push factor connected to home and communities was largely due to traditions on the reservation that participants desired to avoid. One of the participants stated:

One thing I didn’t approve of is how they pushed the um . . . traditional . . . practices on the kids . . . you know . . . they make them learn traditional things . . . And it . . . I think that’s . . . that should be an option . . . um . . . if I want my kids to learn, I’ll teach them. . . . Ah . . . it just . . . a lot of it is . . . superstition and I just don’t agree with a lot of it. That’s why to me it’s . . . it should be optional. (p. 11)

The second emerging theme was lifestyle; this section ascertained that many of the participants choose to live off the reservation in more urban areas because of conveniences such as housing, museums, and stores. One participant suggested:

“I never went home. I like the city and I like the city life, like the mall, so I stay here. . . . Reservation life you are home and something you have to worry about is using the water, you have to haul the water, so we had to worry about the electricity because we did solar panel and the electric water and sewage lines don’t go as far as the reservation and the roads aren’t paved, so they are not suitable, so there is a big difference, you have to travel one hour to go to town, so its kind of hard. . . . In the city everything is convenient, everything is right there, that’s what I like.” (p. 12)

The third emerging theme indicated how infrastructure, services, and tribal operational systems contributed to push factors. The participants expressed frustration over the lack of infrastructure such as housing, utilities (water and electricity), and the bureaucracy (red tape). A participant stated:

Unfortunately there’s a lot of bureaucracy with the rez. I mean just . . . just to move back . . . you know . . . you gotta apply at Windowrock with (???), as soon as you get that on your way and you still have the ah . . . grades and permits that you have to do with the land . . . you know there’s a lot of set up that you have to do . . . So I think to expedite that process I think would help people come back to the reservation. And it wouldn’t really discourage the people from coming back to help the reservation. You know . . . I think there’s too much red tape. (p. 17)

The fourth emerging theme was opportunity. One participant expressed:

You know looking at a job market [on the reservation] there is really nothing where I am at where I want to be . . . but I need to find something that is going to be equivalent to what I am doing right now and it's going to keep me you know wanting to perform and exceed. (p. 19)

The research suggested common push factors that the Navajo Nation must overcome in order to reduce the brain drain. The study found that tribal members desired to return to the reservation to live and to work, but too many members experienced economic and social barriers, preventing them from doing so (McKenzie et al., 2013).

Research has not been done directly on pull factors of the Navajo Nation. However, McKenzie et al. (2013) indirectly identified a few pull factors. The participants were interviewed to understand why educated Navajos did not return to the reservation; however, simultaneously, they identified reasons that would cause them to return to the reservation. Some of the participants expressed a desire to return home for family and cultural reasons and to give back to their nation. One participant stated family as a pull factor as follows:

The people who are going to the big corporation or schools colleges they are always will come back home because I think we are all attached to the reservation we are all attached to families. . . I believe our grandparents are always our teachers, like grandma and grandfather are our teachers, I learned from them and they raised me pretty good, that is the only reasons I go back. (p. 10)

Another participant expressed cultural feelings as a pull factor as follows:

I think for so long we were told that being white is better, but it is not. When you discover, when you move away from the reservation, it's really awakening. You realize

it's not like that. We have a strong culture, we have a rich language and history and we have to be proud of it and it is really about learning about the outside world. It is still important to maintain who you are. . . . Remember where you came from your language your culture, your land, your family it is really important. (p. 11)

Another participant suggested the desire to give back as a pull factor:

I did a speech and I said if any of you know any jobs that are available I want to come home and help my community I want to be back home and see if there is anything I can do to help students. And they said they would but nothing came through. (p. 9)

Although limited data is available, this article provided excellent insight into emerging themes that could possibly explain why some educated Navajos returned home to the reservation. Further investigation as to why educated Navajo emigrants return to the reservation would be beneficial to creating policies that benefit the nation as a whole.

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APPENDIX B: GUIDING QUESTIONS

1. Can you tell me a bit about your life growing up on the Navajo Nation (e.g., where did you live? where did you go to school? what activities were you involved in? what did you want to be when you grew up?)
2. After you graduated from high school, you began attending college, can you tell me a bit about your experience in college (what colleges did you attend? What did you study? Who did you live with/spend time with? What extracurricular activities were you involved in? etc.)
3. What were your career plans as you were working on your college degree? How did these change over time?
4. What thoughts did you have while you were in college about returning to live on the Navajo Nation?
5. As you considered your plans after graduation from college, what were your thoughts about returning to live on the Navajo Nation? What were the key issues as you considered this possibility? As you consider your future, what thoughts do you have about living on the Navajo Nation? What are the key factors you will consider as you make future plans?
6. What advice would you give to others who are considering the question of whether to live on the Navajo Nation after they graduate from college? How do you see the issues involved in the decision changing over time?

APPENDIX C: CONSENT FORMS

Introduction

This research study is being conducted by Robert Yazzie at the Diné Policy Institute and Aaron Jackson and Steve Smith at Brigham Young University to understand the decision of Navajo Nation residents to either return to the Navajo Nation or live off the Navajo Nation after completing their college education. You were selected to participate because you lived on the Navajo Nation before going to college and have now graduated from college.

Procedures

You will be asked to participate in a 20–60 minute interview. The interviewer will ask you about your educational experiences and your decision to live on or off the Navajo Nation since completing your college degree.

Risks/Discomforts

There are minimal risks for participation in this study. However, you may feel emotional discomfort when answering questions about personal decisions.

Benefits

There are no direct benefits to participants. However, it is hoped that through your participation researchers will learn more about people's decisions about living on or off the Navajo Nation. We hope this research will inform Diné policy on postsecondary education and economic development.

Confidentiality

All information provided will remain confidential. The investigators (listed above) and their research teams will have access to the interview data for the duration of the study. All data, including questionnaires and recordings/transcriptions from the focus group, will be kept in a locked storage cabinet and only those directly involved with the research will have access to them. After the completion of the study the data will be given to the Navajo Nation.

Compensation & Participation

No formal compensation will be given. Participants will receive thank you gifts for their participation (e.g., caps, pens, mugs, gift cards, etc.) Participation in this research study is voluntary. You have the right to withdraw at anytime or refuse to participate entirely without concern for any negative consequences.

Questions about the Research

If you have questions regarding this study, you may contact Aaron P. Jackson, Ph.D., at 801.422.8031, aaron_jackson@byu.edu, or Robert Yazzie, JD, at robertyazzie@dinecollege.edu

Questions about your Rights as Research Participants

If you have questions regarding your rights as a research participant, you may contact Lane Fischer, PhD, IRB Chair, (801) 422-6461, 133 TLRB, Brigham Young University, Provo, UT 84602, Christopher_Dromey@byu.edu

I have read, understood, and received a copy of the above consent and desire of my own free will to participate in this study.

Signature: _____ Date: _____

APPENDIX D: DEMOGRAPHIC INFORMATION SHEET

Interviewer _____

Participant _____

Date of Interview _____

Participant's Education History

Elementary School(s) _____

Middle/Jr. High School(s) _____

High School(s) _____

Year of Graduation _____

College(s) _____

Year of Graduation _____

Major _____

Minor _____

Graduate School _____

Year of Graduation _____

Degree _____

Current Occupation _____

Years in this occupation _____

Contact Information

Address _____

Phone _____

Email _____