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ASSESSING THE RELATIONSHIP BETWEEN DISCRIMINATION AND HEALTH AMONG
MEXICAN IMMIGRANT FARMWORKERS

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ABSTRACT

Background: Growing evidence indicates that Mexican immigrant farmworkers experience discrimination based upon their ethnicity and foreign-born status. However, little is known about how discrimination impacts farmworkers' health.

Objective: Therefore, this thesis will explore how perceived discrimination shapes the way farmworkers describe their health.

Methods: This study analyzed eight open-ended semi-structured interviews of Mexican immigrant farmworkers who lived in Lubbock, Texas. NVivo (QSR International, v7) was used to code and qualitatively analyze the interview transcripts. Responses with the most coding references and most extensive discussion were listed as major themes.

Results: The results begin with a case study of a female farmworker, highlighting themes that arose through analysis. Three themes emerged from the qualitative analysis: (1) The primary source of perceived discrimination for farmworkers is their boss; (2) Immigrant status is a significant influence on how farmworkers describe their experiences of discrimination; these characteristics include the ability to speak English, country of birth, and ethnicity; and (3) Farmworkers' experiences with discrimination are linked with their perceived health. Participants connected discrimination to their health by citing occasions where employers forced farmworkers to work through injury or by suggesting that health care providers were biased against farmworkers.

Conclusions: Descriptions of discrimination by farmworkers confirm existing knowledge on how individuals detail the relationship between discrimination and health. Further research is necessary understand what other health effects beyond injuries are related with discrimination among Mexican immigrant farmworkers.

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LITERATURE REVIEW

Much evidence indicates that discrimination plays an important role in disease risk and health outcomes among racial and ethnic minority populations. For example, discrimination is highly associated with hypertension (Williams and Mohammed 2009), depression (Schulz, Gravelle et al. 2006), cardiovascular disease (Harris, Tobias et al. 2006), and generalized anxiety disorder (Soto, Dawson-Andoh et al. 2011). Moreover, there is longstanding evidence which illustrates unequal access to quality health care services for minority populations (Smedley, Stith et al. 2003).

Unfortunately, racial and ethnic minorities bear a large burden of discrimination in the United States. An important group of the United States minority community is people who consider themselves Hispanic. They are the fastest growing ethnic group in the United States. Even with their growing numbers, perceived discrimination among Hispanics persists. However, there is little discussion on how Hispanics perceive discrimination in terms of their own health. This thesis aims to understand the relationship between perceived discrimination and health among Hispanic immigrant farmworkers. Farmworkers are a particularly relevant population to study discrimination and health as they make up the largest percentage of all immigrant workers (US Department of Labor, 2005). Moreover, farmwork is filled with health hazards, including exposure to harsh chemicals and increased risk of injury (Arcury, Quandt et al. 2006; Mills, Beaumont et al. 2006). These health hazards are made worse by the perceived burdens that farmworkers face, including substandard housing, unfair labor practices, and discrimination based on language (Snipes, Thompson et al. 2007).

While much evidence exists about the health burdens of farmworkers, little is known about how discrimination impacts farmworkers' health. Therefore, the following reviewed literature will outline the relationship between discrimination and health among Mexican immigrant farmworkers, and it will provide a background necessary to discern the relationship between farmworkers' perceived discrimination and their health.

Defining Discrimination

Before further discussing discrimination and its connection with health, it is appropriate to offer a definition of discrimination. Williams (2009) defines discrimination as the "differential treatment of ... groups by both individuals and social institutions". A separate definition from The United Nations Convention on the Elimination of Racial Discrimination indicates racial discrimination as "any distinction, exclusion, restriction or preference based on race, colour, descent, or national or ethnic origin which has the purpose or effect of nullifying or impairing the recognition, enjoyment or exercise, on an equal footing, of human rights and fundamental freedoms in the political, economic, social, cultural or any other field of public life" (United Nations. General Assembly. Committee on the Elimination of Racial Discrimination. 1979). Together, these definitions describe discrimination as distinct from forms of prejudice. While prejudice is defined as the internal preference for one group over the other, it does not manifest as discrimination until a person acts upon their prejudice.

Much of the research on discrimination in the United States benefits from the more extensive research on racism. Many studies mentioned in this review study racism rather than discrimination, but they still bear significant relevance due to the similarities between the two concepts. As noted, discrimination is the differential treatment of groups; racism can be defined more specifically as the differential treatment of a group of people based upon their race by both individuals and institutions. Despite the important differences between racism and discrimination, this review includes studies measuring both constructs as they share important similarities. Jones (2000) outlines three forms of racism which could also be characterized in discrimination: institutionalized, personally mediated and internalized racism. Institutionalized racism refers to the unjust systems which provide differential access to power and material

conditions. Examples of institutionalized racism include unequal representation in government in addition to disparities in education, housing and medical facilities. Personally mediated racism manifests as interpersonal acts that discriminate against particular people. Lastly, Jones defines internalized racism as “the acceptance by members of the stigmatized races of negative messages about their own abilities and intrinsic worth” (2000). Understanding research on racism elucidates what discrimination is and provides a background for how it relates to health.

Much research in the field of discrimination operationalizes the definition of discrimination as perceived discrimination, which Banks and colleagues (2006) and Williams and colleagues (1999) define as a behavioral manifestation of a negative attitude, judgment, or unfair treatment toward members of a group. Although measures of perceived discrimination are not objectively verified, researchers have demonstrated that acute instances of perceived discrimination still can be characterized as instances of stress, linking discrimination to poor health outcomes (Pascoe and Richman, 2009; Williams et al., 2003). For example, discrimination is directly linked to depression (Finch, Kolody et al. 2000), hypertension (King and Hauser 2005) and breast cancer (Taylor, Williams et al. 2007).

Mental Health Outcomes

Among the research linking health and discrimination, investigators have established the strongest association between negative mental health outcomes and discrimination. In a recent literature review by Williams and Mohammed (2009), the authors referenced 115 articles published between 2005 and 2007 of which 47 studied the association between discrimination and a mental health outcome. Only two of the 47 mental health studies found no association between discrimination and health (Williams, 2009). Additionally, a review of the literature between 2001 and 2006 by Paradies (2006) found 72% of studies investigating a relationship between negative mental health outcomes and discrimination had a positive association. The negative mental health outcomes described within these two recent reviews highlight the wide variety of mental health conditions. Specifically, a study within the United Kingdom among racial and ethnic minorities demonstrated an independent positive association between reported instances of discrimination and cases of anxiety and depressive disorders (Bhui, Stansfeld et al. 2005). Black Africans who reported unfair treatment at work were nearly three times as likely to have anxiety or depression. In another study, perceived discrimination explained the higher number of cases of post-traumatic stress disorder in Hispanic police officers when compared to Non-Hispanic Caucasian police officers (Pole, Best et al. 2005). Additionally, perceived discrimination is shown to lead to lower self-esteem. Smokowski and Bacallao (2007) found in a study of Latino adolescents from North Carolina that perceived discrimination served as a significant predictor of low self-esteem. Research shows that quality of life measures are affected by perceived discrimination. Pantzer and colleagues (2006) describe discrimination significantly negatively affecting a quality of life measure among adolescent immigrants to Spain. Of all the mental health disorders mentioned, depression and anxiety have received the most attention. This literature review will discuss studies investigating depression and anxiety more closely.

Depression

Although investigators initially found mixed results between discrimination and depressive symptoms, recent evidence has demonstrated a strong association between the two concepts. For example, in a longitudinal study by Schulz and colleagues (2006) a change in discrimination among African American women in Detroit was significantly related to a change of depressive symptoms. Recently, researchers have initiated more investigations targeting Latinos and Mexican immigrants. In a recent study among immigrant farmworkers of primarily (95%) Mexican-American decent, over 41% of surveyed individuals met caseness for depression (Hiott, Grzywacz et al. 2008). The authors suggested discrimination in addition to a variety of other stressors contributed to the high rate of farmworkers who meet the cutoff for depression. Finch, Kolody and Vega (2000) contend that perceived discrimination has an independent effect on depressive

symptoms among adults of Mexican origin. The effect found within the study is heavily moderated by a range of factors related to acculturation. Highly acculturated Mexican immigrants were more likely to experience discrimination and report depressive symptoms than less acculturated immigrants. Further commentary on how acculturation mediates the relationship between discrimination and health appears below.

Anxiety

A great deal of evidence now connects perceived discrimination to anxiety disorders. Gee and colleagues (2007) detail that Asian Americans reporting racial discrimination were twice as likely to have an anxiety disorder even when controlled for sociodemographic characteristics, acculturative stress, family cohesion, poverty, self-rated health, chronic physical conditions and social desirability. From the 1995 Detroit area study, Banks and colleagues (2006) demonstrate a positive association between perceived everyday discrimination and symptoms of anxiety and discrimination. In a study of United Kingdom immigrants, primarily of Caribbean, Indian, Pakistani, Bangladeshi and Irish origin, experience of interpersonal racism and perceived racism both independently predicted for increased risk of anxiety and depression (Karlsen, Nazroo et al. 2005). These three studies investigated the relationship between discrimination and anxiety through distinct populations, Asian-Americans, African-Americans and immigrants to the United Kingdom respectively. When viewed together, they show the clear link between discrimination and anxiety disorders.

Physical Health Outcomes

Although, researchers have not accumulated the same amount of evidence linking physical health and discrimination, a many conditions have been associated with discrimination. Merritt and colleagues (2006) describe a laboratory test in which African American men experienced elevated cardiovascular reactivity in direct response to instances of racism. This elevated cardiovascular activity suggests an active stress response, which would degrade heart health over time. Discrimination's effect on hypertension has been extensively studied over the past two decades. Cross sectional investigations suggest a conditional association between hypertension and discrimination. An investigation of from the Metro-Atlanta Heart Study shows that discrimination was not a significant predictor of hypertension. However, individuals with the highest magnitude of perceived stress from an instance of discrimination were more than twice as likely to be hypertensive (Davis, Liu et al. 2005). Therefore, the stress response from instances of discrimination was the important predictor. Laboratory studies, such as those directly measuring cardiovascular reactivity, show a positive association between discrimination and hypertension.

In addition to hypertension and cardiovascular reactivity investigations, studies have explored the relationship between discrimination and low birth weight. By investigating California birth certificates, Lauderdale (2006) uncovered women with Arabic sounding names gave birth to infants of a significant decreased weight following the September 11, 2001 attacks on the United States when compared to a year before. Lauderdale suggests that Arabic women were subject to increased discrimination after the attacks, leading to the decreased birth weight. By far the largest numbers of studies have investigated hypertension. Therefore, further commentary on studies investigating hypertension appears below.

Hypertension

Multiple researchers have investigated the connection between discrimination and hypertension. Thus far, laboratory research has shown a clear link between instances of discrimination, stress and raised levels of blood pressure (Clark and Gochett 2006); however, population-based research has achieved mixed results (Davis, Liu et al. 2005). Brondolo and colleagues (2003) reviewed literature on the link between perceived racism and hypertension related variables (blood pressure, self-reported hypertension and cardiovascular reactivity). Studies garnered mixed results. Occasional cross sectional studies will show a link between discrimination and hypertension (see Ryan et al., 2006 below), while most cross sectional studies yield the

conditional associations (Davis, Liu et al. 2005; Brown, Matthews et al. 2006).

Ryan et al. (2006) determined a U shaped relationship between perceived discrimination and systolic blood pressure among African Americans, Black immigrants and Latino immigrants. This data from the New Hampshire Racial and Ethnic Approaches to Community Health 2010 Initiative implies that individuals who did not report discrimination and those who perceived the most discrimination experienced hypertension. Another study measuring the connection between racial discrimination and hypertension conducted by Krieger and colleagues (2008) found different results. Krieger and colleagues did not find a significant relationship between systolic blood pressure and racial discrimination. Nevertheless, the authors found suggestive evidence of a link between systolic blood pressure and response to unfair treatment, “implying that in a context of high exposure, differential susceptibility to the exposure matters.” By no means do the aforementioned studies serve as a representative sample of the literature, but combined with laboratory studies they illustrate the close connection between discrimination, stress and hypertension.

Gaps in Discrimination and Health for Farmworkers/Latinos

An important caveat to consider when investigating the association between discrimination and health among immigrant farmworkers is how acculturation moderates the relationship. Research demonstrates that first generation immigrant populations live longer and healthier lives than their decedents (Fennelly 2007). Observers contend selection bias occurs in that immigrants to the United States are extraordinarily healthy compared to individuals who do not migrate to the United States. Recent data on Mexican immigrants to the United States discredit this hypothesis (Rubalcava, Teruel et al. 2008). Viruell-Fuentes offers another plausible theory to explain the discrepancy in health outcomes between first and second generation Mexican immigrants to the United States (2007). Through 40 in-depth interviews with Mexican-American women of Michigan, Viruell-Fuentes describes a process of “othering” that second generation Mexican immigrants encounter. The “othering” and discrimination immigrants face serve as a potential explanation for worsened health status (Viruell-Fuentes 2007).

An investigation of seasonal farmworkers from Mexico in California by Alderete and colleagues (1999) supports Viruell-Fuentes assertion. Study participants with the highest levels of acculturation were more than six times as likely to meet caseness requirements for depression compared to those with low levels of acculturation. Despite some supporting evidence for Viruell-Fuentes’ hypothesis, some research complicates the mediating role acculturation plays between discrimination and health. A qualitative investigation has shown instances of discrimination experienced by Latino fathers were associated with depressive symptoms in less acculturated families when compared to more acculturated families (Crouter, Davis et al. 2006). Moreover, Crouter and colleagues saw no relationship between instances of discrimination and health among more acculturated participants. These mixed results in how acculturation modifies the relationship between discrimination and depressive symptomatology demonstrates the need for further investigation.

Discerning the Link between Discrimination and Health

Multiple theoretical frameworks and pathways can explain the connection between discrimination and health. Further research is still necessary in order to discern the various ways the different types of discrimination is linked to health. Pascoe and Richman (2009) outline a model explaining the connection between perceived discrimination and health seen in Figure 1. Pascoe and Richman hypothesis suggests perceived discrimination directly affects physical and mental health and indirectly affects health through a heightened stress response and health behaviors. Additionally, they propose that social support, stigma identification and coping style can serve as mitigating factors in the link between perceived discrimination and health.

Figure 1: Pascoe and Richman's Model of Perceived Health and Discrimination

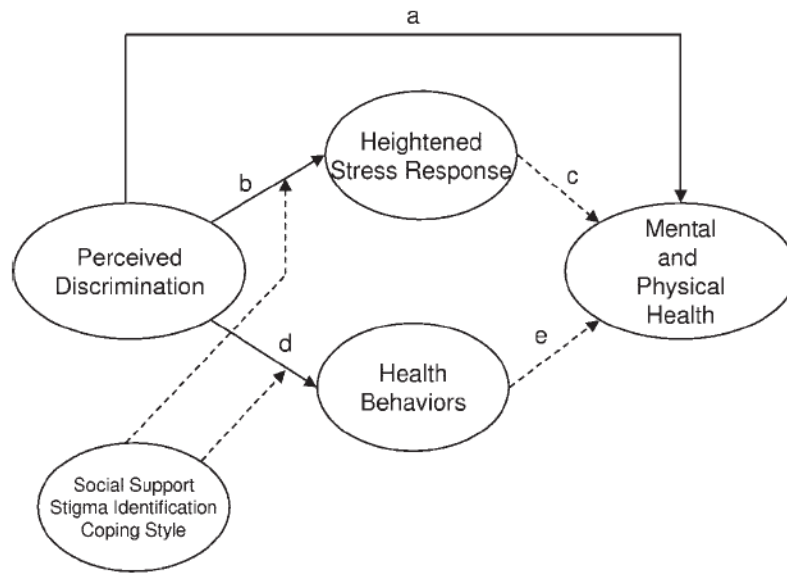


Figure 1. Pathways by which perceived discrimination influences health outcomes. Solid lines indicate analyzed pathways; dashed lines represent pathways hypothesized by past research.

(Pascoe and Richman, 2009)

Health Burdens of Farmworkers

Farmworkers encounter many health concerns. In contrast to most other laborers, farmworkers are exposed to dangerous chemicals (Arcury, Quandt et al. 2006). Additionally, farmwork has some of the highest rates of occupational injury (Mills et al., 2006). Moreover, Villarejo and colleagues (2003) reported that only 12-22 percent of farmworkers had access to medical insurance through their employers and Medicaid. Limited usage of medical care could have a long-term negative impact on farmworkers' health. In addition to all of these factors, recent evidence indicates that farmworkers experience both work and community-based discrimination based on their ethnicity and foreign-born status, which may negatively influence health outcomes (Snipes, Thompson et al. 2007).

Where does this study fit in?

While much evidence exists about the health burdens of farmworkers, little is known about how discrimination impacts farmworkers' health. Therefore, this study will explore how perceived discrimination shapes the way farmworkers describe their health. Understanding how farmworkers describe instances of discrimination and their health status will bolster the existing literature about farmworkers.

Hypothesis 1: Within this study, I expect farmworkers to describe occasions of discrimination that happen at work and in their everyday lives.

Hypothesis 2: Instances of discrimination will be linked with farmworkers' descriptions of poor health.

METHODS

Study Description

Information gathered for this thesis was collected as part of a larger study called “The Immigrant Farmworker Experience: An ‘Ethno-Occupational’ Health Assessment.” This study had two aims. First, the Immigrant Farmworker Experience study used cultural ethnography to document the health experiences of a cohort of Mexican immigrant farmworkers as they migrated from the Texas-Mexico border to Lubbock, TX. (Ethnography for this investigation is defined as a systematic approach to study how beliefs are coupled with behaviors). Second, ethnographic tools were layered with occupational health hazard assessments to gain knowledge about beliefs, values and behaviors of farmworkers related to occupational health hazards including pesticide exposure, pesticide safety practices, agricultural injury and access to health care.

For this thesis investigation, in-depth interviews from the Immigrant Farmworker Experience Study were analyzed. The main objective was to explore how perceived discrimination shapes the way farmworkers describe their health.

Recruitment

Ten farmworkers entered the investigation through a convenience sample. To be eligible for the study, farmworkers had to have: a minimum age of 16 years, employment in agriculture at the time of enrollment and the intention to migrate for agricultural employment over the next two months at the point of encounter. Farmworkers were recruited in-person using fliers containing study information and eligibility requirements. Recruitment took place at two community locations: 1. The Lower Rio Grande Migrant Head Start Regional Office in Donna, TX along the TX-Mexico Border and 2. The Lubbock County Migrant Head Start Office. After being presented with the flier, interested individuals provided their name and telephone number. Potential participants were called to discuss details of the study, ask any questions and confirm eligibility. If farmworkers met all requirements for the study, they were enrolled for participation.

Human Subjects Protection

All recruitment, data collection and other procedures for this study were approved by the Human Subjects Board at the University of Texas M.D. Anderson Cancer Center Internal Review Board in Houston, TX. Prior to collection of any data, informed consent was gained from each participant. Farmworkers received \$50 after completion of all data for this investigation.

Questionnaire

Participants completed a short questionnaire, which assessed demographic information, language proficiency, and language use. Questionnaires were conducted with Spanish or English, depending upon the preference of the farmworker participant.

Interviews

Semi-structured interviews were conducted in the participants’ homes. Participants chose whether to give the interview in Spanish or English, depending on their language preference. Questions focused on agricultural migration patterns that farmworkers took to find work, injuries from work, healthcare-seeking patterns, and perceived risks of pesticide exposure and other occupational activities. All interviews were audio-recorded and transcribed verbatim. Each participant was given a unique identification number rather than the individual’s name. The interviews lasted approximately an hour.

Qualitative Data Analysis

A trained bilingual research assistant transcribed all interviews. Interviews conducted in Spanish were translated into English. All interviews were transcribed and translated by the same individual to ensure reliability. Additionally, notes taken during the interviews were also used to ensure accuracy of the transcripts.

Several steps were taken to ensure careful, systematic qualitative analysis. First, the interviews were coded using “open coding” (Glaser 1967; Strauss 1990; Bernard 2006). “Open coding” consists of using salient key words and phrases that emerged from the transcripts to formally identify categories and concepts relevant to the primary research questions.

From the open coding, a comprehensive set of codes was created. The condensed list of codes was developed based the most relevant codes to the research question. The principal investigator and thesis advisor reconciled coding differences over several meetings, which were held to handle discrepancies in coding and to revise the coding scheme as needed. Finally, the research team compared codes and responses until consensus was reached for all transcripts.

NVivo (QSR International, v7) was used to code and qualitatively analyze the interview transcripts. Using NVivo, the research team ran coding reports for all codes and code relationships. Code reports were then used to compile comprehensive tables that highlighted the number of coding references (words, phrases, or statements) associated with each code. Additionally, a table with overlapping codes was created to understand which codes co-occur. Analysis was an iterative process, reviewing coding reports of the queried texts, reading related transcript paragraphs and re-reading all transcripts. Responses with the most coding references and most extensive discussion were listed as major themes.

RESULTS

The Story of Angelita Herndandez*¹

Angelita Herndandez is 39 a year old female farmworker. She was born in the United States as the daughter of two first-generation immigrant parents – Miguel Hernandez and Rosa Peña. Angelita’s parents were both farmworkers. They came to the United States with worker visas and later earned their American citizenship. Miguel and Rosa had five children; Angelita is the youngest and the only girl.

Angelita began working in agriculture as a child. She recalls vivid and pleasant stories of working with her siblings on her father’s cotton farm. She hated the work as a child, but loved the time with her siblings to play, learn and earn money for things like candy, toys and school supplies. She continued to work on her father’s farm throughout primary school and began working for other farmers’ throughout secondary school. After graduating high school, Angelita joined the rest of her family working in the fields fulltime. That is where she would soon meet her future husband, Jaime. They married at the ages of 22 and 20.

Today, almost 20 years later, Angelita works as a migrant farmworker. Angelita and Jaime have five children together. She and her family travel the country as they look for work in corn, tomatoes, cherries and apples. Currently, she is working in Texas in the cotton fields.

Angelita dislikes the work, but she’s good at it. She is able to weed fields quickly – a skill learned from her father when she was a child. Today, Angelita has an important responsibility among her fellow employees; her position allows her to choose which farmworkers her manager will hire. Her boss will even fire some farmworkers based upon her recommendation. But Angelita only recommends that farmworkers be fired if they are not doing their job. Her boss knows and trusts her, since Angelita started working for her boss at

¹ *Names and personal details have been changed to protect the participant’s identity.

the age of twelve. In fact, Angelita has a twelve year-old boy of her own named David. He works alongside her, helping to eliminate weeds from the cotton fields in order to earn extra money for his sneakers of choice – Air Jordan’s.

Angelita’s story intensifies as she discusses the pregnancy and birth of David, who started working in the cotton fields to make extra money when he was 5 years old. Here is Angelita’s story in her own words....

‘The last time I had my baby, I was out [in the fields]... [The doctor] told me to come back [into the hospital].’

He said, ‘I need you to come in.’ He continued, ‘because it doesn’t look good.’

I said, ‘Why? I have to go out there [in the fields], and I have to work.’

He replied, ‘No, if you go back out there... you can injure your baby really badly, and I’d have to press charges.’

The doctor told me, ‘You have low amniotic fluid. You can have your baby [now], but he could be blind. Also, your baby could be stillborn...’

I said, ‘Is stillborn dead?’

He said ‘Yeah.’

I said, ‘Nab, if I have to have [my baby], let me have it.’

He continued by saying there was not enough [fluid] and if I kept him for the rest of the month, the month that I needed, he would have gone blind or been dead... Then he said something else, but I couldn’t remember because when I heard stillborn my ears started ringing.

I said, ‘No, let me just come back.’

I left the hospital. I had to come [back to work] and find somebody to run the field for me. I had to pack my stuff for the hospital and if I was not back in an hour he was going to press charges for the neglect to an unborn child. He said that it was serious. But things like that, [farmworkers] don’t realize because we’re out there trying to make money.

...I was in the hospital for at least three days... Even while I was in labor, the boss was calling.

He said, ‘Hey, you know, these people aren’t doing their job.’

My doctor said, ‘Turn off that phone! If you can have that baby, turn it off.’

After I had the baby, a couple of hours later, I talked to him. He wanted me to... [start working again] as soon as I got out of the hospital. I told him I couldn’t. I waited at least two weeks, maybe a week and a half.

Unfortunately, after her pregnancy, Angelita learns of troubling news about her newborn son. Angelita recounts the effects of her difficult pregnancy with David.

Three months after having David, [David] couldn’t see right. My little baby couldn’t see. You [could] just come up to him and do this [almost touch his face], and he wouldn’t blink. He couldn’t see you. If you ... snapped your fingers, he’d turn. He could hear, but he couldn’t see ... There were a lot of things that affected [David’s condition]. I was out there pregnant, which I shouldn’t have been.

Thankfully, after 3 months David gained his vision. Angelita further describes the pressure to return to work after her pregnancy. Throughout her week and a half stay in the hospital, her boss continued to call her, urging her to come back to work as soon as she was released. She describes her own concern for losing her job after her difficult pregnancy.

...and I went out [to the fields]

Because my boss said, 'ok ... if you can't handle [the other workers], I am going to hire somebody else'

I couldn't lose this job because it's my summer job.

Ok, so I said 'no, I'll go back out there.'

Two years later Angelita was still experiencing complications relating to her difficult pregnancy. Angelita eventually needed a hysterectomy. She describes in the following passage when she learned of her condition.

...but I didn't even know that things like that could happen, and that's because I couldn't afford insurance. I would go into the emergency room. They said it was nothing... As soon as I got [insurance], I went to see my doctor, my OBGYN.

He told me, 'hey, your uterus has fallen, and there's a tumor growing on top of it. You're going to have to have a hysterectomy.'

I said, 'How did my uterus fall?'

He said, 'probably because you didn't take care of yourself after having [your last] baby.'

[He was right.] I didn't [take care of myself]. I just went back out there. I didn't even tell [my boss] I wasn't supposed to work. I went out there for three weeks, and I wasn't supposed to work. I was on medical leave, but if I told him he [would have] fired me."

Angelita's story characterizes the unfair treatment farmworkers encounter. Although not distinctly labeled as discrimination, her boss' insistence that she returned to work may have forced her to have the hysterectomy. Additionally, her poor medical care may have complicated her condition until it required surgery. Fortunately, Angelita is now ok, and David can now see. However, their story serves as an example of the potential links between unfair treatment and health among Mexican immigrant farmworkers. .

Participant Characteristics

Ten farmworkers participated in this investigation. Six participants were born in Mexico; four were born in the United States. Farmworkers were primarily male (n=9) and spoke Spanish as their main language (n=6). Other demographic characteristics of the sample of farmworkers are available in Table 1.

Table 1: Demographic and Language Proficiency of Sample

Demographics		
Measure	n=	Percent
Age		
20-35	5	50
36-45	2	20
46+	3	30
Place of Birth		
U.S.	4	40
Mexico	6	60
Number of Children in Household		
1	1	10
2	4	40
3	1	10

5	2	20
6	1	10
9	1	10
Household Income		
\$10,000 to \$14,999	1	10
\$15,000 to \$24,999	8	80
\$25,000 to \$34,999	1	10
Highest Education Completed		
4th grade or less	2	20
5th through 8th grade	1	10
9th grade through 11 th	6	60
High school/GED	1	10
Ethnicity		
Hispanic	3	30
Mexican	7	70
<i>Language Proficiency</i>		
Measure	Frequency	Percent
First Language Learned		
Spanish	10	100
English Proficiency		
Poor	1	10
Fair	3	30
Good	5	50
Excellent	1	10
Spanish Proficiency		
Fair	2	20
Good	5	50
Excellent	3	30
What Language Most Spoken At Home		
Spanish	7	70
English	2	20
Spanish/English Equally	1	10
What Language Most Spoken At Work		
Spanish	5	50
English	3	30
Spanish/English Equally	2	20

Overview of Themes

An in-depth analysis of relevant codes and associated texts² revealed three salient themes.

(1) The primary source of perceived discrimination for farmworkers is their boss; Farmworkers describe their boss as the agent of most discriminatory experiences.

(2) Immigrant status is a significant influence on how farmworkers describe their experiences of discrimination; Farmworkers explain the discrimination they encounter by referencing characteristics one would likely find among recent immigrants. These characteristics include the ability to speak English, country of birth, and ethnicity.

(3) Farmworkers' descriptions of discrimination are linked with their perceived health. In particular, farmworkers detail instances where their bosses require them to work through injuries. Working through injury can degrade health as seen within Angelita's story.

Boss as the Source of Discrimination

Farmworkers' bosses served as the primary agent of described instances of unfair treatment at work. Six of eight farmworkers interviewed referenced some form of unequal treatment at work. Of these cases, four of six farmworkers directly referenced their boss as the source of such discrimination. Farmworkers raised concerns over unfair payment practices, being forced by their employer to work despite suffering from severe injuries and worries about unequal practices for the hiring and firing of employees.

One of the most common topics that participants discussed employers' unequal payment practices. One farmworker complains about the low wage his bosses have paid him.

It's [the] farmers. They're cheap. They don't even pay seven fifteen an hour. They don't even pay you that. They pay you like six non. It's cheap. When I first started working, I started getting like five fifteen an hour and then they started feeding me and I got five fifty and then six dollars. Then I started driving the tractors and they raised me up to seven. Then I get better at tractors, then eight. I guess it all depends in how you work.

Another farmworker described how farmers treat their employees poorly. He describes bosses firing and not paying workers money they earned.

...I won't say [farmers] bully, [however] some farmers, they are like that. ... [For example], some farmers farm with you. Some march a year or so many hours [with you]... And then whatever just gets cut off and they have nothing [to do with you]; they fire you. That way they won't pay you your money. Besides, some of them really don't care about you and me [farmworkers].

The same farmworker of the previous quotation describes an instance where his boss fired him unfairly. In this description the farmworker discusses a conversation with a former employer. The farmworker wanted to take a Sunday off to spend time with his mother for Mother's Day, but his boss wanted him to work all day. The farmworker stopped working at noon, but his boss still fired him.

...There was a farmer...it was Mother's Day, and we had worked all week. It was a Sunday, and I told him I didn't want to work on Sunday because it was Mother's Day.

He said, 'Well if you don't show up to work, well, just don't come Monday.'

Then I thought about it, and I needed my job. You know?

I said, "Well I can work till noon."

² Although ten farmworkers participated in this investigation, two interview transcriptions were lost due to inaudible tape-recordings. Analysis of common themes was performed on the remaining eight interviews.

He didn't really like it, so I got fired for just working until noon.

Not all farmworkers referenced experiences of unfair treatment at work. In fact, some even argued that there were no inequalities in their workplace. Two farmworkers described their bosses treating workers fairly. Those workers described equal pay and fair promotion practices as examples of how bosses equally treat employees. The first farmworker describes how a boss provides equal pay to all workers.

Unfair. Nah, because [the boss] pays you every Friday. Yeah. The only bad thing is that they were cheap."

Another farmworker talks about promotion practices, and he suggests that his boss gave him greater responsibility after he learned appropriate skills.

...I learned to irrigate. Then [I learned how to use] the tractor, and that's how I went up.

Farmworkers described some bosses treating them unfairly, while other farmers treated them well. The man who was fired for working a half day on Mother's Day had very complementary things to say about another boss.

I told my boss that I wanted to work. [I wanted to] try something different.

He said, 'oh, that's all right, I'm not going to get mad that you want to try something different. That's all right with me. Don't stay here helping me if you can make more money'

... Anyway, I left, and he would pay me pretty well. When I had something to tell him, [if I ever] needed something, he always listened. He would take his time and sit down, and we talked about it. One way or another he would help me.

Overall, farmworkers indicated more descriptions of unequal treatment from their bosses than instances of fairness. To ensure this, in depth analysis of the coding references for discrimination and the boss were performed. There were only two references where farmworkers described the boss with equal treatment compared to fourteen references of the boss linked to experiences of unequal treatment. Therefore, farmworkers predominantly described their boss as a source of discrimination rather than equal treatment. However, they understand that certain employers would treat them poorly, while others would treat them well.

Immigration Status Influencing Experiences of Discrimination

In addition to referencing who was responsible for discrimination (bosses), farmworkers also discussed why they encountered discrimination. Farmworkers suggested multiple explanations including: country of birth, English proficiency, and ethnicity (Hispanic/Latino vs. non-Hispanic/Latino). In the last few quotations of this subsection, a farmworker details how instances of discrimination affect his health.

Country of birth was the most discussed factor explaining discrimination. In the following quotation, a farmworker explains receiving lower pay due to his birth in Mexico compared to other farmworkers born in the United States.

When he [the boss] pays you weekly, he pays [farmworkers born outside of the United States] different than he pays them [US-born workers]. He pays them more. He gives more benefits to those born here than us.

The same farmworker explains discrimination by discussing being born in Mexico rather than the United States. He argues that someone born in the United States would have received time off from work after the birth of a child.

When this one [his wife] had given birth [pointing to his child], when we had the babies, I had to ask for some days off. I asked him, and he got mad because all he wants is to keep me working. He doesn't let me [have any time off from work]. Well,

I'm from Mexico, but he will let the Chicanos (individuals born in the United States) [take time off]. That's not right. That's racism or something like it.

Farmworkers sometimes talked about their English proficiency and their limited access to the legal system to explain discrimination. In the following passage, the same farmworker as the previous passages discusses his status as a migrant farmworker (An individual who moves from one location to another for seasonal agricultural work). He explains his unequal pay compared to non-migrants.

He pays less because we're migrants, but it's not the same although we do the same work. The difference is that they can defend themselves because they know English, and we only speak it a little bit. We don't know many words to defend ourselves against the boss.

The interviewer asks, 'But is your work the same?'

And the farmworker responds, 'Yes. The work is the same. We all do the same thing.'

Farmworkers' descriptions of discrimination are linked with perceived health.

The same farmworker also described how discrimination from his boss negatively affected his health. He was emphatically against his boss' stance of not providing employees time-off after they injured themselves. He describes individuals born in the United States receiving time-off after injuries compared to farmworkers born in Mexico.

Well that...comes out being an injustice because he makes you work injured. ...The Chicanos, the ones born here in the US, he doesn't make them work [through injury]. They go. He lets them go home for two or three days until they're healed and then they come in to work.

The bosses are not the only source of discrimination that farmworkers experience. When discussing an attempt to access health care, the same farmworker as the previous passage describes discrimination based upon his ethnicity. He believes doctors treat Latinos worse than they would treat White people.

Sometimes, well sometimes they treat Whites better than those of color like us or Latinos. Yes, I believe they do. It depends on the doctors because there can be doctors that don't. They see that somebody is of Latino color and they don't treat them the same as they would a White person.

The previous references from one farmworker demonstrate his unequivocal thoughts on how previous bosses and health professionals discriminated against him because of his country of birth, language, and ethnicity. Working through injuries and being discriminated against by physicians as described within these passages could negatively affect farmworkers health.

DISCUSSION

To understand how immigrant farmworkers relate instances of discrimination with their health, this study analyzed eight interviews with farmworkers who lived in Lubbock, Texas. Farmworkers primarily described discrimination that occurred at work. They linked their boss' insistence for employees to work through injury as a negative influence on their health. The analysis of interviews details extensive commentary by farmworkers on what discrimination they face, who commits the discrimination, why participants are targeted with discrimination, and how it impacts their health.

This qualitative examination of discrimination experienced by farmworkers provides great insight in how they perceive and explain instances of discrimination. It complements the works of many studies explaining the health burdens and medical care provided to Mexican immigrant farmworkers in the United States. For example, the finding that farmworkers report discrimination from their bosses is supported throughout

available literature. Snipes and colleagues (2007) describe farmworkers' discussions of injustices. These injustices were primarily instigated by employers. Cited cases of injustices included farmworkers receiving lower payment than what was initially guaranteed and an employer firing a woman and then rehiring her only after a promise that she would not seek medical care if injured again (Snipes, Thompson et al. 2007). Related to these findings, Dominquez (1997) describes sex discrimination female farmworkers face from employers. This entails fewer hours, less pay, unequal hiring and promotion practices, segregated working assignments, and a lack of housing. Additionally, Horton and Linder (1996) outline legislation dating back to the 1930's that prevents farmworkers from receiving unemployment insurance. Concerning Horton and Linder's findings, farmworkers in this study did not directly implicate the government or other institutions when discussing who discriminated against them. Moreover, this study only included one female participant, and she did not discuss differences between female and male farmworkers. Although this study did not confirm all types of discrimination described within previous research, there is earlier evidence confirming that farmworkers attribute discrimination they encounter to their boss.

Concerning the second major theme, other studies have confirmed that Mexican immigrants explain discrimination by their immigration status. Rosenbloom & Way (2004) found Mexican immigrant adolescents explain discrimination because of immigration concerns (country of birth), English proficiency, and ethnicity. In their study relating mental health outcomes with discrimination, Alderete and colleagues (1999) employed an acculturative stress scale modified from The Hispanic Stress Inventory from Cervantes et al. (1990). The acculturative stress scale included four questions measuring perceived discrimination. Alderete and colleagues measured discrimination by asking questions concerning how others treat them, whether they have difficulties finding work due to their Mexican descent, whether they feel unaccepted because of their Mexican culture, and whether or not they've been discriminated against. Questions addressed ethnicity and cultural background (a related theme to both language and country of birth). Romero and Roberts (2003) interviewed Mexican immigrant adolescents in middle school. The adolescents most vividly described discriminatory stress stemming from a lack of English proficiency. These studies confirm the findings on how Mexican immigrants explain discrimination. The only explanation of discrimination which other studies have not confirmed is an inability to access the legal system. However, this could partly be explained by limited English speaking skills. Overall, previous studies among Mexican immigrants confirm how Mexican immigrant farmworkers explained discrimination.

Much evidence confirms risks of occupational injury in farmwork, but limited research outlines how discrimination mediates the relationship between occupational injuries and health outcomes. McCurdy and colleagues (2003) summarize agricultural injuries among migrant farmworkers, who are largely of Mexican descent (90% of sample was born in Mexico). 9.3 per 100 farmworkers were estimated to sustain an injury over the course of a year (McCurdy, Samuels et al. 2003). Other qualitative research has been conducted to describe the health and injury concerns of farmworkers (Stallones, Acosta et al. 2009). Stallones and colleagues (2003) cite a farmworker who describes similar concerns of unequal treatment described in this study. The farmworker became injured, but his boss pressured him to continue working, despite recommendations from a health professional that he take time off (Stallones, Acosta et al. 2009). Discrimination is not considered within their study; therefore, further research is appropriate to understand whether and how farmworkers perceive discrimination when working through injury. Additionally, more research is necessary to measure the indirect health effects of such discrimination, possibly the psychological and physical health outcomes.

The health effects of discrimination from health care providers have been well documented (Smedley, Stith et al. 2003). Only one farmworker interviewed described discrimination in a health care setting, but other research confirms such discrimination. Previous studies have shown language has served as a barrier for Latinos to access medical care (Flores et al, 1998). Additionally, perceived provider discrimination by Latinos and other minorities was a significant predictor to lower self-reported health (Lee, Ayers et al. 2009). A language barrier could be only one concern that immigrant farmworkers face when accessing health

services. Racial/ethnic minorities within the United States have a long history of encountering discrimination when accessing health services. This has included receiving fewer medical procedures, a lower quality of care, and fewer referrals to specialists (Williams and Jackson 2005), which has contributed to a higher rates of mortality of many types of cancer, heart disease, and cerebrovascular diseases (Smedley, Stith et al. 2003). Therefore, farmworkers may endure health consequences due to discrimination manifested from unequal treatment from health care providers.

Limitations

There are several limitations to this investigation. This original study, “The Immigrant Farmworker Experience: An ‘Ethno-Occupational’ Health Assessment” was not designed to investigate the relationship between discrimination and health. Instead, interviews included questions on migration and farmwork, injuries risks of other occupational activities. Participants discussed instances of discrimination, but they were not prompted to do so. Designing an interview that intended to investigate the relationship between discrimination and health may have elicited further descriptions that would complement the existing information detailed within this study. However, some evidence suggests that the interview design may not have served as a large detriment to the results. Viruell-Fuentes (2007) notes in a study using in-depth interviews among first and second generation Mexican immigrants that the participants were not forthcoming when questioned directly about discrimination. Rather, many instances of discrimination were unclear, thus possibly underestimating instances of discrimination (Viruell-Fuentes 2007). Regardless of the difficulty of measuring discrimination, it is likely that revised interview questions could increase the amount of information available and therefore improve this study.

Instances of discrimination detailed within this study should not be generalized to all cotton-farms, farms on West Texas, or to individuals of the same demographic characteristics of those in this study. Also, there is reason for concern that some farmworkers did not speak openly and freely about discrimination and their health status. Farmworkers often noted their fear of losing their job. Considering some of the contradictions seen between interviews (farmworkers never getting injured at work versus the descriptions of some who detailed many injuries), it is possible that participants did not speak openly due to fear of losing their positions. As a result, instances of discrimination may have been underreported within this sample. Another potential limitation in this study was the small sample size (n=8). In-depth interviews from eight individuals produced a great depth of knowledge, but expanding the sample may have elicited discussion on a broader range of topics surrounding discrimination and health.

Although individual stories must be kept in context, broader themes from this research still remain applicable to other Mexican immigrant farmworkers in the United States. Farmworkers throughout the United States may also describe discrimination stemming from their boss and explain it through their immigrant status as detailed within this study. Moreover, the health effects of farmworkers working through injuries could serve as an important health indicator in the future.

Novelty of Study

This thesis uncovered new ways to understand the links between discrimination and health that were not previously noted in scientific literature. For example, participants did not detail how instances of discrimination contributed to anxiety, depression, or hypertension. Rather, farmworkers detailed very direct health effects of discrimination (working through serious injury and discrimination by health care providers). Moreover, farmworkers attributed instances of discrimination to their boss, manifesting itself through unequal pay and unfair hiring and firing practices as a result of their immigration status.

The unique methods of the study allowed for a depth of commentary by farmworkers on the links of discrimination and health, which has not been presented elsewhere in the same way. Such rich detail of farmworkers describing what discrimination they face, who commits the discrimination, and why they are

targeted with discrimination has not been published to the author's knowledge.

Implications and Future Studies

Understanding how farmworkers describe discrimination may help advocates, policy makers, and researchers know more about where to target their efforts to reduce discrimination in this population. Advocates can target agricultural employers to ensure fair hiring and firing practices, payment, and time-off due to injuries. A heavy focus should be placed on ensuring time-off for farmworkers when they face injuries. Much agricultural work is time-sensitive and employers may feel pressured to have a full workforce. However, this study described instances where farmworkers worked through injury, and sometimes it resulted in further health complications as seen within the story of Angelita Hernandez. Ensuring farmworkers take off work when injured may prove mutually beneficially for employers and farmworkers alike.

Future research is necessary to understand the relationship between discrimination and health among immigrant farmworkers. Researchers should study the individual concerns that farmworkers raised: unequal pay, hiring practices, working through serious injuries, and firing practices to understand the extent of each problem. Moreover, further studies are needed to disentangle the different factors that make up immigration status. Under what conditions do farmworkers receive discrimination for their English speaking ability versus their country of birth? Are different actions of discrimination (such as unequal pay or unfair firing practices) related to particular components of immigration status? Additionally, researchers should study other potentially health concerns of farmworkers. Although hypertension, depression, anxiety, chronic stress were not described by this sample of farmworkers, do other farmworkers encounter these diseases from discrimination? Finch and colleagues (2000) have suggest an independent relationship between discrimination and depressive symptoms among farmworkers, but further research can elucidate a connection for other health outcomes or bolster the understanding for depression. Ethnographic investigation of farm owners and managers could help clarify the relationship between discrimination and health among farmworkers from an entirely separate population.

More broadly much more research is needed to understand the health risks of immigrant farmworkers. Although participants did not voice concerns over some groups being disproportionately exposed to pesticides, other researchers have highlighted the many risks associated with pesticide exposure among farmworkers (Snipes, Thompson et al. 2009). If certain groups of immigrant farmworkers encounter discrimination and an increased exposure to pesticides, they could experience multiple health concerns.

CONCLUSION

This paper provided detailed descriptions of discrimination from Mexican immigrant farmworkers working in Texas. Analysis of eight in-depth interviews synthesized three major themes: farmworkers' bosses are the primary source of discrimination, farmworkers explain discrimination due to their country of birth, English language skills, and ethnicity, and experiences of discrimination are linked with farmworkers' health. Farmworkers voiced health concerns about working through injuries and discrimination from health care providers. Further research is necessary to understand other health effects of discrimination, but this study provides a solid background on how immigrant farmworkers perceive and explain discrimination.

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