

“No somos máquinas” (We are not machines): Worker perspectives of safety culture in meatpacking plants in the Midwest

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Funding information

Nebraska Tobacco Settlement Biomedical Research Development Fund (NTSBRDF), Grant/Award Number: 2018–2020

Abstract

Background: Meatpacking is dangerous, dirty, and demanding (3-D) work—much of which is done by immigrant workers. It is characterized by high rates of occupational injuries and illnesses due to the speed of the production line, repetitive motions, and other inherent exposures. The purpose of this qualitative study was to explore perceptions of safety culture among Hispanic/Latino meatpacking workers in the Midwest.

Methods: Five focus groups with a total of 28 participants were conducted between March 2019 and February 2020 with Hispanic/Latino meatpacking workers in Nebraska. Workers were asked about the type of work performed, how the work was physically done, and perceptions of health risks and exposures. Thematic analysis was used to build a description of safety culture within the meatpacking industry.

Results: Three main themes were found: (1) workers depicted a culture where companies cared more about production than people; (2) workers felt powerless in improving their situation; and (3) workers noted that the work was precarious, both dangerous and one where much of the responsibility for safety was shifted to the individual workers.

Conclusions: The meatpacking industry has a poor safety culture. Safety culture within the industry may be improved by ensuring that organizational values and artifacts are aligned with safety by addressing the critical role of supervisors, providing culturally and linguistically appropriate consistent safety training and messaging to the workforce, and enforcing and strengthening safety regulations.

KEY WORDS

food manufacturing, Hispanic/Latino, meatpacking, occupational health, safety, vulnerable workers

1 | INTRODUCTION

Organizational culture includes assumptions, values, and artifacts (e.g., practices, narratives, and other common things that may be observed

but not fully understood by outsiders) that are congruent with both organizational strategy and structure. It is influenced by the industry environment and the local and national culture.^{1,2} Organizational culture manifests itself in the workplace through language, symbols,

narratives, policies, and practices. Workers are socialized into the organizational culture both through formal and informal mechanisms. Culture, therefore, is the product of shared experiences.¹

Safety culture is one component of organizational culture and refers to “deeply held but often unspoken safety-related beliefs, attitudes, and values that interact with an organization’s systems, practices, people, and leadership to establish norms about how things are done in the organization.”³ As such, it tends to be relatively stable over time, shared among workers, transmitted to new workers, and grounded in the history and tradition of the company and industry. Safety culture has both depth (e.g., reflected in organizational traditions, beliefs, and behaviors) and breadth (e.g., coordinated and shared throughout the organization).⁴ Core tenants of safety culture include company and management’s commitment to safety, worker engagement in safety, supervisor safety feedback and enforcement, and coworker behavior norms. Figure 1 depicts the relationship between safety culture and safety-related behaviors and outcomes.

Safety culture is affected by the social structure within an organization and the everyday experiences of the individual worker.⁵ For example, frontline workers may have lower and/or more negative perceptions of safety than higher-ranking workers.⁶ Diverging perceptions of safety between workers and management may undermine efforts to mitigate work-related illnesses and injuries. Safety culture and the related concept of safety climate (i.e., shared perceptions regarding the priority of safety) have been shown to be valid, leading indicators of safety in hazardous work environments such as construction, mining, and agriculture.⁷⁻¹⁰

1.1 | Meatpacking industry

Meat processing or “meatpacking” refers to the slaughtering of livestock like cattle and hogs and the processing and packaging of

carcasses into meat and other byproducts. In the United States, there are over 4000 meatpacking establishments [NAICS code 3116], which employed 519,779 people in 2018.¹¹ Meatpacking is dangerous, dirty, and demanding (3-D) work. Because jobs in the meatpacking industry do not require high levels of formal education or English proficiency, the industry has traditionally attracted large numbers of immigrant workers.^{12,13} In the United States, over 35% of the meatpacking workforce is Hispanic/Latino.¹⁴

Meatpacking is dangerous, grueling work. In 2018, there were 4.3 recordable cases of work-related injury per 100 full-time workers, compared to the “all industries” average of 3.1 cases.¹⁵ Studies have found that workers often experience injuries related to forceful exertions, awkward body positions, repetitive motions, and the use of sharp objects (e.g., knives, scissors).¹⁶⁻¹⁹ Keeping pace with the fast speed of the production line may result in chronic musculoskeletal pain in the back, shoulders, arms, wrists, and hands.^{17,18} Workers may also be exposed to high levels of noise, slippery floors, hazardous chemicals, extreme temperatures, and biological agents from livestock.²⁰ Additionally, workers may experience mental health concerns like depression.²¹ Often, workers do not report injuries until permanent damage has occurred if they get reported at all.¹⁸

Meatpacking is a critical industry in the state of Nebraska. In fact, in 2018 there were 125 meatpacking establishments, which employed 27,895 people throughout the state.¹¹ In 2019, Nebraska was the U.S. leader for cattle slaughter and ranked sixth for pork slaughter.²² The meatpacking industry in Nebraska has high rates of occupational injuries and illnesses, reporting 6.5 recordable cases of work-related injury per 100 full-time workers compared to the state “all industries” average of 3.1 cases.²³ For that reason, the Omaha area OSHA (Occupational Safety and Health Administration) office has continued a local emphasis program, an enforcement strategy to address hazards in meatpacking facilities in the state. In the most recent continuation

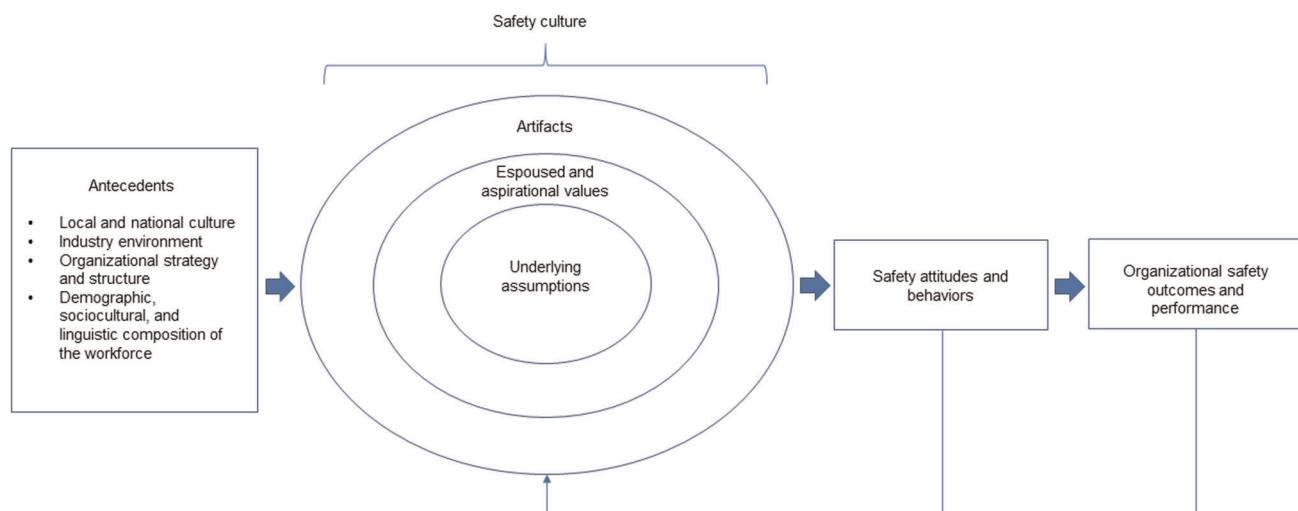


FIGURE 1 Model of the relationship between safety culture and safety-related behaviors and outcomes [Color figure can be viewed at wileyonlinelibrary.com]

documents in late 2019, it was noted that 84.8% of the inspected plants had serious, willful, or repeat violations.²⁴

While there is a body of literature documenting poor working conditions among immigrants in the meatpacking industry, there has been limited peer-reviewed literature on safety culture within the industry.^{17-19,25} However, the high rate of occupational injuries and illnesses indicate this is an important issue to examine.^{25,26} Therefore, the purpose of this qualitative study was to explore perceptions of safety culture among Hispanic/Latino meatpacking workers in the Midwest.

2 | MATERIALS AND METHODS

Data for this study were obtained from a more extensive mixed methods study on Hispanic/Latino meatpacking laborers who had musculoskeletal pain and cardiovascular risk factors. To participate in the study, individuals had to be a Hispanic/Latino meatpacking laborer between the ages of 19 and 65, have muscle pain, and report <150 min of moderate-level leisure time physical activity per week.

2.1 | Procedures

Workers were recruited to participate in the study through word-of-mouth, partnerships with community-based organizations, Spanish-language radio advertising, and Facebook. Five focus groups were conducted between March 2019 and February 2020 in Nebraska with a total of 28 workers. Focus groups ranged in size from three to eight people. There were two groups with eight participants, one with five, one with three, and the final group had four participants. Focus groups were held at community locations including at a community-based organization, a public library, and a church. The research team obtained written consent from all participants before conducting the focus groups. Each focus group lasted approximately 2 h, and 80–95 min were dedicated for discussion. Because the focus groups took place in the evening, a light meal was provided to all participants. A semi-structured guide consisting of seven open-ended questions was developed to explore workers' perceptions about their job and well-being. Occupational health history questions were used to ask workers about the type of work performed, how the work was physically done, perceptions of health risks, exposures, and job satisfaction.²⁷ Each participant also completed a short questionnaire about job-related demands, decision latitude, work discrimination and harassment, need for recovery, and demographic characteristics; however, participants were not asked to provide the name of the company where they worked. All focus groups were conducted in Spanish by a bilingual facilitator. Each participant received a \$40 gift card at the end of the focus group. All sessions were audio-recorded and transcribed verbatim. Transcripts were later back-translated into English for analysis. The study was approved by the Institutional Review Board at the University of Nebraska Medical Center.

2.2 | Analysis

A codebook consisting of both theory and data-driven a priori codes was developed by one of the project investigators. Four members of the research team independently coded the first focus group transcript using the established codebook. The team then met to review and reconcile differences in coding. Emergent codes were discussed among the research team and added to the codebook. Each of the four remaining transcripts were coded independently by two research team members based on the revised codebook. After all coding was completed, members of the research team met to discuss the coding, and all discrepancies in coding were resolved by consensus. Thematic analysis was used to identify the most salient ideas from all the focus group discussions,²⁸ which were then used to build a description of safety culture within the meatpacking industry. Descriptive statistics were generated from the short questionnaire completed by all focus group participants using IBM SPSS statistical software, version 25.

3 | RESULTS

Of the total 28 workers who participated in focus groups, most were from Mexico or Guatemala and had been in the United States for an average of 16.3 years ($SD = 10.5$). The majority of participants (71.4%) had completed less than a high school education and had been working in meatpacking on average for more than 11 years. Table 1 highlights the demographic characteristics of the focus group participants.

All participants agreed that meatpacking jobs were dangerous. Participants noted that line speed, repetitive movements, the use of knives and other sharp objects, large machinery (e.g., forklift), and exposure to extreme temperatures were serious safety concerns.

Across the focus group transcripts, there were a total of 39 codes. These codes were collapsed into three main themes related to safety culture in the meatpacking plant. Themes included: (1) companies care more about production than their people, (2) workers feel powerless in improving their situation, and (3) work is precarious –both dangerous and one where much of the responsibility for safety is shifted to the individual workers. A coding tree is presented in Figure 2, and each theme is described in detail below and supported with quotes from participants.

3.1 | Theme 1: Companies care more about production than their people. *Workers are less important than a bag of meat*

Participants in every focus group discussed the foremost priority of the company being production. They reported that there was a constant concern among supervisors for ensuring that the production line did not stop. Workers discussed feeling as if they were "disposable" and that it did not matter if they got hurt or became ill

TABLE 1 Characteristics of study participants (*n* = 28)

Variable	N (%)	M (SD)
Sex		
Male	7 (25.0)	
Female	21 (75.0)	
Age (<i>n</i> = 27)		46.2 (11.0)
19–35 years old	5 (18.5)	
36–55 years old	15 (55.6)	
>55 years old	7 (25.9)	
Education		
Completed less than high school education	20 (71.4)	
Completed a high school education or more	8 (28.6)	
Nativity		
Mexico	13 (46.4)	
Guatemala	8 (28.6)	
Other	7 (25.0)	
Length of time in the United States (years)		16.3 (10.5)
Tenure working in meatpacking (years)		11.3 (9.2)
Pain frequency during the past 7 days (<i>n</i> = 27)		
Never	8 (29.6)	
Rarely	4 (14.8)	
Sometimes	11 (40.7)	
Often	2 (7.4)	
Always	2 (7.4)	
Pain severity during the past 7 days (<i>n</i> = 26)		
Mild	4 (15.4)	
Moderate	15 (57.7)	
Severe	6 (23.1)	
Very severe	1 (3.8)	

on the job; they had to keep working. In every focus group, participants cited being treated like machines, animals, or something less than human. Across the five focus group transcripts, there were more than 21 references to being treated as a machine or animal.

We are not as important as a bag of meat. I can put it this way because for them if you let a bag of meat fall or it is ripped, it is a lot worse than if you injure a finger or if you are cut.

(FG1, Worker 8)

No somos tan importantes como una bolsa de carne. Yo lo puedo poner así, porque a ellos si se te cae una bolsa de carne o se te corta, es mucho peor a que tú te lastimes un dedo o te cortes.

(FG1, Worker 8)

The owners or the companies are always looking out for their welfare, and they do not care what we as

human beings feel...they do not care how long you have been working or if you just started. They treat you as if you were, as you say, a machine. But really, our body is made of flesh and blood, we are human beings, and we need to be treated as such, as human beings, not as machines.

(FG1, Worker 7)

Los dueños o las compañías siempre están buscando su bienestar, más no les importa lo que nosotros como seres humanos sentimos... a ellos no les importa cuantos años tienes trabajando o si acabas de entrar. Te tratan como si fueras, como dices tú, una máquina. Realmente, nuestro cuerpo es de carne y hueso, somos unos seres humanos que necesitamos que nos traten como tal, como seres humanos, no como máquinas.

(FG1, Worker 7)

They realize that we [Hispanics] are producing, that we are meeting the businessmen's production quotas. They realized that we were able to process 12,000 cows a day, so tomorrow maybe they can add another thousand cows.

(FG3, Worker 5)

Se dan cuenta de que procesamos a la producción de los empresarios. Entonces bueno, se dieron cuenta de que sacaron 12,000 vacas al día y fuimos capaces, mañana quizás puedan agregar otras mil vacas.

(FG3, Worker 5)

The visible hierarchical structure within the plants (e.g., plant administration, supervisors) created to ensure efficiency in production, negatively affected participants' perceptions of safety culture and worker engagement in safety. Participants reported little control over work-related risks and strategies that could be used to manage the risks and protect their health and well-being. Given the speed of the line, the repetitive nature of the tasks, and the understaffing that is prevalent in many plants, workers argued that even if they knew how to prevent an injury, they could not engage in the appropriate preventive safety behaviors.

But sometimes you can't always prevent what is going to happen because the work is so intense that you don't have time for you to prevent anything that can happen.

(FG1, Worker 3)

Pero es que a veces no puedes prevenir lo que puede suceder porque el trabajo es tan intenso que no tienes

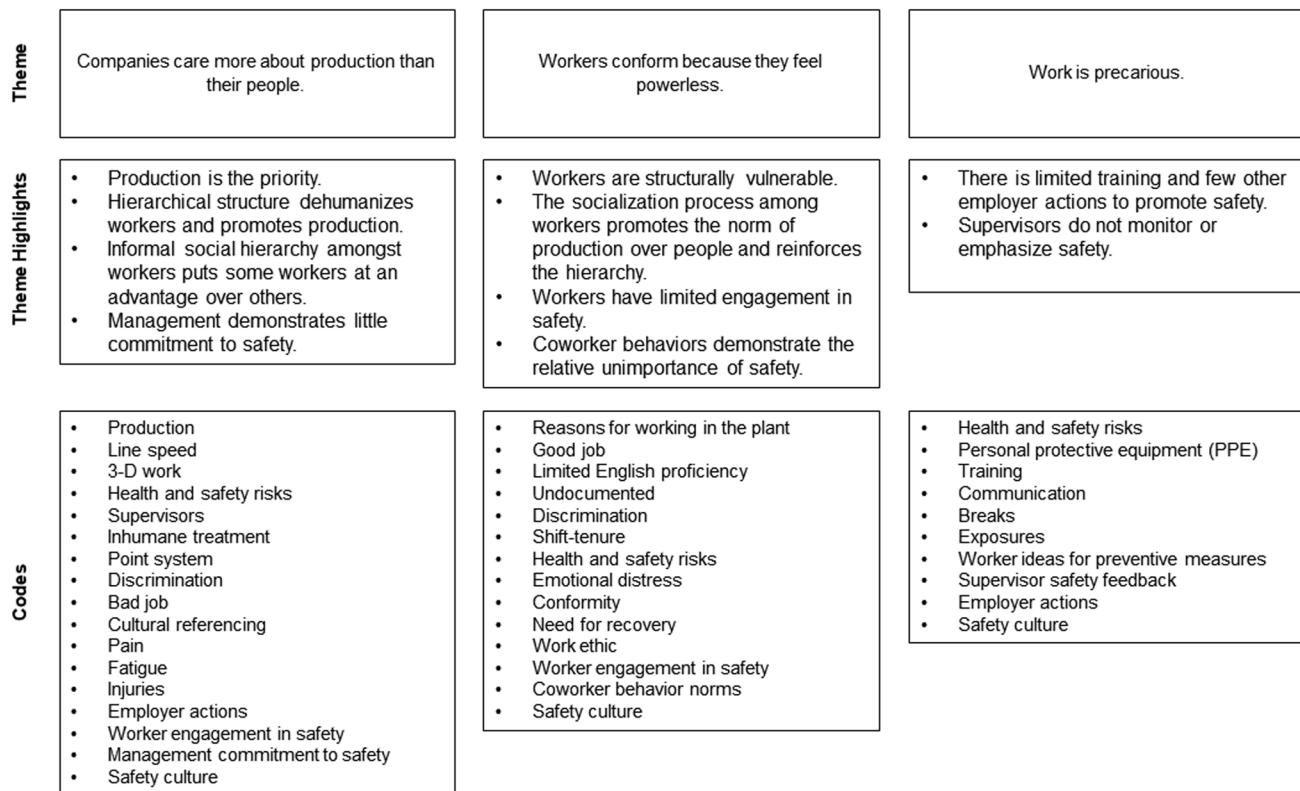


FIGURE 2 Focus group coding tree

tiempo para tú mismo prevenir cualquier cosa que pueda suceder.

(FG1, Worker 3)

Many times the injuries and the accidents happen because everyone is doing work of three people.

(FG1, Worker 4)

Muchas veces las lesiones y los accidentes suceden porque las personas están haciendo el trabajo de tres personas.

(FG1, Worker 4)

Participants felt as if their supervisors did not value them as workers, much less as human beings. Dehumanization was a sentiment commonly shared among participants.

It would be good if one were treated well, like a human being, like the human beings that we are...it would be different but when they treat you, when they don't listen to you, when one talks to the supervisors, they don't even respond to you or answer you.

(FG4, Worker 3)

Qué bueno sería si tienen como un buen trato como humano, como ser humano que somos...pues sería diferente, pero cuando te tratan, cuando no te escuchan, cuando uno está hablando a los supervisores, ni tan siquiera te responden, te contestan.

(FG4, Worker 3)

The supervisors there don't listen to you, and sometimes you make a complaint, and nothing. They ignore you, and that also bothers you and it, well, it makes you cry.

(FG4, Worker 5)

Los supervisores allí no te escuchan, y a veces les pones una queja, tampoco. Te ignoran y a veces eso también te molesta y te, pues, te causa también, a llorar.

(FG4, Worker 5)

I think that they do not treat us the way that they should as people that we are because they are more interested in the work than us as people.

(FG5, Worker 4)

Yo pienso que no nos tratan como tienen que tratarnos, como personas que somos porque a ellos les interesa más el trabajo que nosotros como personas.

(FG5, Worker 4)

Participants perceived that there was an informal social hierarchy as well within the plant based on employment status (e.g., regular or temporary worker), race/ethnicity, and English proficiency. Within this hierarchy, temporary workers were ranked at the bottom and were those with the least protection and lowest pay. White workers occupied the highest level, and Hispanic/Latino workers ranked below them. Individuals who could speak English were able to be promoted quicker than those who had limited English proficiency even without specific task knowledge or supervisory experience. This social hierarchy disrupted communication flow, limited peer-to-peer learning, and stifled the promotion of safety.

The ones that have the worst jobs are us the Hispanics. You are not going to see an American in a bad job. I do not know how they work it out, even if they start tomorrow. But all of a sudden you see the American that started after you, and they have a good job. He gets injured and they have him outside the infirmary all the time. Now, a Hispanic injures himself and the next day they send you back in...Because it is like there is a racism, I don't know, all of the bad is for the Hispanics. You don't see—you will never see a bad job for an American, never...well maybe they will always have us below [Americans].

(FG5, Worker 4)

Los que tenemos los trabajos más malos somos los hispanos. Tú no vas a ver a ningún americano en un trabajo malo. Yo no sé cómo se las arreglan, aunque entren mañana. Pero de momento tú ves al americano que entró último de ti, tienen un buen trabajo. Se lesionó y lo tienen todo el tiempo allí frente a la enfermería. Ahora un hispano se lesionó y al otro día te mandan para adentro... Porque es como si fuera un racismo, no sé, todo lo malo es para los hispanos. Ya no ves—no vas a ver nunca en un trabajo malo un americano, nunca...bueno a lo mejor siempre nos van a tener abajo.

(FG5, Worker 4)

The preference is always there, at every moment, during the eight or ten hours of work, the preference is there. If an American comes and cannot handle the work, they offer him help. They quickly bring someone to help him. If a Latino is there for 20 years or 18, he has to do it, and he has to do what the American coworker next to him can't do. "Help him when you can." If I can with my work, I do it,

and obviously I'm waiting for my coworker to do his job so I can continue with mine.

(FG1, Worker 7)

Siempre la preferencia está, a cada instante, en las ocho o diez horas de trabajo, la preferencia está allí. Si algún americano llegó y no puede con el trabajo, le ponen ayuda. Rápidamente le traen a alguien que le ayude. Si un Latino está ahí por 20 años o 18, ese lo tiene que hacer, y tiene que hacer lo que también el americano de al lado no puede. "Ayúdale cuando puedas." Si yo puedo con mi trabajo, yo lo hago, y obviamente estoy esperando que mi compañero haga el suyo para yo continuar con el mío.

(FG1, Worker 7)

It started with us going to that meeting with my coworkers because usually everything is for plant workers and very little for us temporary workers. It seems horrible. I think that they should have not invited us because they make us look like we are nothing but we do the same job that they do. Even though, it is not my coworkers' fault, right? They do get bonuses, they get everything, but we work like that [in temporary positions] because we are illegal, right.

(FG3, Worker 6)

Y nos empezó con ir con mis compañeras a esa reunión porque todo era pa'l as de planta, todo, muy poco era para, para nosotros, entonces pues me parece horrible, no deberían de invitarnos porque es como si no fuéramos nada y hacemos lo mismo que las demás. Aunque mis compañeras no tienen la culpa, ¿no? A ellas sí les dan bonos, les dan de todo, porque tienen de planta todo, pues yo iba porque somos ilegales, ¿no?

(FG3, Worker 6)

There is a lot [of discrimination]...when a "güera" comes to work, I mean, an American woman, and we are there for a long time working, and if a "güera" comes to work, and goes to the bathroom every time, almost every hour goes to the bathroom, every time, and nobody says anything to her. Oh, but if one of us that have been working here for a long time go to the bathroom, they will call us to the office to scold us. Then it is discrimination because they do not treat us the same.

(FG1, Worker 5)

Hay mucha [discriminación]...cuando llega a trabajar una güera, o sea, una americana, y estamos nosotros ahí por

tiempo trabajando, y si llega una güera a trabajar, y va a cada rato al baño, casi cada hora va al baño, cada rato, y nadie le dice nada. Ah, pero que vaya al baño alguien de las que estamos ahí por tiempo trabajando, ya nos está llamando a la oficina a regañarnos. Entonces sí es discriminación porque no nos tratan iguales.

(FG1, Worker 5)

Workers reported that plant management showed limited commitment to safety and engaged in practices that led participants to believe that management did not care about their well-being. They reported that supervisors and coworkers reinforced the internal norm of production over people.

I told him, "It's just that it is very fast." I told him [the supervisor], "It is very fast, my hand hurts." [Supervisor responds] Look, I am going to tell you the truth. I cannot promise you that the line is going to slow down. On the contrary, it is going to increase [in speed]. Because in a company, when have you seen a company want to lose profit? We want to increase profits.

(FG2, Worker 4)

Yo le dije, "Es que está muy recio." Le dije, "está muy rápido, me duele mi mano." Mira, te voy a decir la verdad. No te prometo que la línea va a bajar. Al contrario, va a subir. Porque en una compañía, ¿cuándo has visto una compañía que quiera pérdidas? Queremos ganancias.

(FG2, Worker 4)

I think that it is dangerous because even if you take care of yourself, even if one follows the rules that they say—well, when one starts working at the plant, well, they have rules the—safety rules and all of that. Those rules aren't enforced because they want production and they don't care about those accidents, well, those dangerous ones that can happen. But like I have been telling you it is not necessary for one to be careless, instead others are.

(FG4, Worker 3)

Yo digo que sí es peligroso porque aunque se cuida, aunque uno obedece las reglas que dicen—bueno, cuando uno entra en la planta, pues, tienen reglas que—de la seguridad y esto. Esas reglas no lo aplican porque quieren producción, y les valen esos accidentes, pues, peligrosos que pueden pasar. Pero como les estoy diciendo no es necesario que uno se descuida, sino que otros.

(FG4, Worker 3)

3.2 | Theme 2: Workers conform because they feel powerless. *I can't quit. Me conformo*

Participants discussed many reasons why they work in meatpacking, but most reported the need for a job to be able to support themselves and their families. Many reported being structurally vulnerable due to having limited English proficiency, being undocumented immigrants (i.e., immigrants without legal authorization to work in the United States), or having completed limited formal education and training. Because of these circumstances, participants reported not having other options for work. They felt as if supervisors and plant leadership took advantage of them because they knew the difficulty they would have to find other work if they quit.

We don't speak English. We don't have another option. We don't have another form of work. Because that is where they pay us the best and we want to get ahead, but that way we are also killing ourselves because every day the line is faster.

(FG5, Worker 4)

No hablamos inglés. No nos queda de otra. No tenemos otra forma donde trabajar. Porque allá es donde mejor nos pagan, y queremos como que salir adelante. Pero así también nos estamos matando porque cada día la línea es más rápida.

(FG5, Worker 4)

One hopes to get a good job...where one is treated good, but since one cannot speak the language, like everyone, then one conforms himself/herself to being there.

(FG2, Worker 5)

Uno desea tener un buen trabajo...donde hay un buen trato de vida. Pero como uno no puede hablar el idioma pues, como todos, entonces uno se conforma de estar ahí.

(FG2, Worker 5)

Well, it's one of the first options we have because—well one has—is not here legally.

(FG3, Worker 3)

Pues es como una de las primeras opciones que ahí hay porque—pues uno tiene—no está legal.

(FG3, Worker 3)

Participants also noted that due to their work at the plant, the uncertain hours and physiopsychological fatigue they experienced because of work, they did not have the opportunity or the energy to engage in other activities after work, such as learning English, which could help them to either get promoted or find another job.

I have been working in the meatpacking plants for 25 years. And, in a certain way, I'm still there because of the language, because I haven't been able to learn English. And one of the reasons why I haven't been able to is because of the same reason, my job, and if you do not work you do not have anything to pay the bills with. So, if you are working, what energy or desire will you have left to go to school to study? You are not able to learn new things since you're very tired, and that's why I'm working there because I do not know English. If I knew English, I would go and get a better job.

(FG1, Worker 5)

Yo aquí tengo 25 años trabajando en empacadoras. Y, de cierta manera yo sigo allí por lo mismo por el idioma, porque no he podido aprender inglés. Y una de las razones que no he podido, por lo mismo, el trabajo, y si no trabajas no tienes para los billes. Entonces, si tú estás trabajando, ¿qué energía o ganas te van a quedar para ir a la escuela a estudiar? Ni te entran ya las letras, ya que estás tan cansado, y es por lo que yo estoy trabajando ahí, porque no sé inglés. Porque si yo supiera inglés, yo voy y me busco otro trabajo mejor.

(FG1, Worker 5)

New workers were socialized to conform to the norms of the plant to perpetuate the hierarchy and social system within the plant. They also discussed how coworker behavior norms reinforced the organizational culture and described coworkers as being unfriendly, uncollaborative, and unwelcoming to newcomers who were left to "figure things out" by themselves.

There are those who do not even know how to tie those new ones, and they look at them and instead of helping them they just laugh. "Look, he doesn't know."

(FG5, Worker 2)

Hay quienes no se saben ni amarrar eso nuevos, y los han mirado y en vez de ayudarlos se ríen. "Mira, ese no sabe."

(FG5, Worker 2)

When I started no one taught me. I learned by myself how to put the hooks on and that is why I injured myself,

putting on hooks. So those that have been there longer think that you are going to take their job so they do not teach you.

(FG5, Worker 5)

Cuando yo empecé, a mí nadie me enseñó. Yo aprendí solo a poner los ganchos, por eso me lesioné, a poner los ganchos. Entonces los que están ahí que llevan más tiempo piensan que tú le vas a quitar su trabajo, y entonces no te enseñan.

(FG5, Worker 5)

Participants believed there was little to nothing that they could do to improve their working environment. Many were afraid to advocate for themselves because of their financial necessity to have a job and few options for other employment. Most had a limited understanding of their labor rights and workplace policies related to topics such as workers' compensation.

But of the injuries, those of the body, there is not much one can do because we have to work—to do what they are demanding from us, what they are asking us to do.

(FG2, Worker 4)

Pero de las lesiones, así del cuerpo, no hay mucho qué hacer porque pues tenemos que trabajar—a lo que nos están exigiendo, a lo que nos están pidiendo.

(FG2, Worker 4)

I have seen how other people fall and they slip because in a plant like that, it is wet all of the time. All the time there is water running because the machines are dripping water. There are waters with chemicals, the fat from the meat, and who knows what else. Right? But at the same time, I can see my colleagues that the reason that they don't say anything, they don't open their mouths, is because of the fear of losing their jobs, and of—not being in good standing in this country, not having a good status [referring to immigration legal status]. That is what keeps them stuck in that place.

(FG2, Worker 2)

Allí he visto cómo las personas se caen, que se resbalan porque en una planta así todo el tiempo está mojado. Todo el tiempo está corriendo agua porque las máquinas están tirando agua. Hay aguas con químicos, el cebo de la carne y cuántas cosas ¿verdad? Pero igual, yo puedo ver mis compañeros que la razón que ellos no dicen nada, no abren la boca, es por temor a perder el trabajo y de no

estar bien en este país, no tener una buena estatus. Eso es lo que los detiene a estar estancados en ese lugar.

(FG2, Worker 2)

There is no order. And look—my coworkers also see that since there is no safety, they see that there is nobody that will scold them.

(FG2, Worker 9)

No hay una orden. Y mira—también mis compañeras miran así como no hay seguridad, miran que no hay nadie que regaña.

(FG2, Worker 9)

They are always giving us meetings, but for the meetings, they are always the ones giving them and they are the ones that talk, talk, talk and we cannot even give our opinion. We cannot say anything, and they say, "Tell your supervisor if you need anything." But when we tell them, they don't listen. Sometimes they ignore us and just keep walking.

(FG4, Worker 4)

Siempre nos están dando meeting, pero los meetings los dan y ellos hablan, hablan, hablan y nosotros no podemos opinar, no podemos decir nada, y ellos dicen, "Dígale a su supervisor si necesita algo." Pero cuando le decimos, ellos no escuchan. A veces nos ignoran y siguen caminando.

(FG4, Worker 4)

3.3 | Theme 3: Work is precarious. Use PPE and 'be careful.'

Participants reported that the companies made efforts to mention the importance of safety, but they perceived limited meaningful action to improve safety within the plants. Most participants recalled only limited safety training when they were hired. Participants described the initial training as general and not specific to the actual tasks they performed. Few participants described any ongoing or regularly occurring safety education.

With regard to risks on the job—well [we're told] to always use personal protective equipment, use the protective equipment and be careful in everything that needs to be done as demanding as the job may be.

(FG2, Worker 2)

Y de riesgos en el trabajo—pues usar siempre el equipo de protección, usar el equipo de protección y pues tener cuidado en todo lo que se va a hacer por carrereado que sea el trabajo.

(FG2, Worker 2)

We watch videos that have nothing to do with the meatpacking plant...they are good, but they need to be related to the work area.

(FG2, Worker 8)

Vemos videos que nada que ver con lo de la planta... sí son buenos, pero deben ser relacionados con el área.

(FG2, Worker 8)

The trainer supposedly goes and tells you, "Well this is the job, look at it. Stay there and I'll be back in a little while." Thing is that we never see him again, and they just leave you there. They don't train you. They don't tell you. Those that are there, the coworkers, [you ask] "Hey, how does this go? What is this?"

(FG5, Worker 3)

El entrenador supuestamente va y te dice, "Pues ese es el trabajo, míralo. Ahí te quedas y al rato vengo." Cosa que ya nunca lo volvemos a ver y allí te dejan. Ni te entrena, ni te dice. Las que están allí, las compañeras, "¿Ey, cómo va esto? ¿Qué es esto?"

(FG5, Worker 3)

Workers received mixed messages about safety. They noted that there was a discrepancy between the production mindset of the supervisors and the safety standards outlined in training. On the one hand, they described the company saying that safety was important and that workers should not knowingly engage in unsafe practices. However, the reality was that the supervisor oversees the work and monitors production. If the supervisor noticed that a person was not keeping up with production goals, then that worker may face repercussions, regardless of whether working slower was related to a safety concern.

They give us trainings supposedly about ergonomics. The one who gives us the training, she always says, "When things are done correctly, you don't have to be making an effort." But she is not the person who is with us at work. I mean she demands that we should say no. But if we talk, if we say no...then later they will say, "This person does not want to work, she does not want to do it."

(FG3, Worker 4)

Nos dan capacitaciones se supone sobre ergonomía. La que nos da la capacitación ella siempre dice, "Cuando las cosas están, ustedes no tienen que estar haciendo el esfuerzo." No es la persona que está con nosotros en el trabajo, o sea, ella nos exige que nosotros debemos de decir no. Pero si nosotros hablamos, decimos no, entonces ya a la hora de...ya van a decir, "Fulana no quiere trabajar, no quiere hacerlo."

(FG3, Worker 4)

One worker mentioned she was appointed to be the safety lead on her shift; however, she still had all of her usual responsibilities on the line, which limited her ability to engage in safety-focused activities with other workers.

I am the safety lead and we have a meeting every week. They tell us that if we see something that our coworkers are doing wrong that we tell them. And that we must ask—ask them if they are feeling well or—but I sometimes feel bad about being in charge of safety because I have to be working, and I can't be taking care of my coworkers. (FG2, Worker 4)

Yo soy la de seguridad y nos dan unas juntas cada semana. Y pues nos dicen que si miramos algo que están haciendo mal nuestros compañeros les digamos. Y que les preguntemos si se sienten bien o—pero yo a veces me siento mal como encargada de la seguridad, porque yo tengo que estar trabajando y no puedo estar cuidando a mis compañeros. (FG2, Worker 4)

Although safety and well-being were important to workers, the organizational practices were incongruent with a strong safety culture. Companies espoused the value of safety, but workers did not perceive the employer's commitment to improving safety practices and outcomes and reported few concrete and consistent actions taken by employers to protect their health and well-being.

4 | DISCUSSION

Our study documented workers' perceptions of safety culture in the meatpacking industry in the Midwest. Among participants, there was consensus that plants prioritized production over all else. Participants reported that companies did the bare minimum to be able to "check the box" on safety. Because of the workers' structural vulnerability (i.e., limited English proficiency and lack of authorization to work in the United States), they did not have options for other jobs.^{29,30} Therefore, workers reported having to conform to the situation in the plants. Participants noted that meatpacking was precarious work and that individual workers bore the risks of their employment and received limited benefits and protections. Many of the concerns raised by participants such as the fast speed of the production line, the prevalence of occupational injuries, and workers

feeling a lack of agency to improve conditions were consistent with what had been previously documented more than a decade ago.^{31,32}

Culture is pervasive. Workers' perceptions of safety culture within the plant were incompatible with safety excellence. Based on the framework outlined by Petitta et al.,⁴ the plants described by participants could be considered to have a technocratic safety culture, one that adhered to safety practices only if it did not interfere with the achievement of production goals. Research has documented that technocratic cultures were negatively related to safety compliance, supervisor enforcement of safety, and overall safety climate.⁴

Companies can create environments for safety to flourish by creating a culture that supports safety at all levels—from the leadership level to mid-level management and down to individual workers. Culture can be created by leadership in what they pay attention to, what they measure, how they allocate resources, how they react to incidents within the plant, and what they reward.³³ Culture is also created by mid-level management including supervisors in what they promote in the daily working environment, what issues they discuss with their teams, how they embody company values, and how they manage the workflow. In our study, participants noted that talking about safety and reporting hazards to supervisors was futile. Previous research suggests that this may be a common element of the culture of the meatpacking industry and that underreporting of injuries is commonplace.^{18,34} Workers may not report injuries because they fear negative repercussions such as having their hours being cut, being assigned "points" as part of the embedded disciplinary system, or other forms of retaliation from their supervisors.³⁵

Culture is further embedded and reinforced through the organizational structures, systems, and strategies.¹ In part due to the hierarchical structure of these plants, leadership and supervisors accepted limited input from line staff leading to limited worker engagement and sometimes outright disengagement in safety. Clearly, in a strong safety culture, safety-related communication must flow bidirectionally and there must be a trust that the company and leadership have the workers' best interests in mind. However, participants in our study repeatedly mentioned that production was the primary concern at their workplace, and it was at the expense of the workers' physical, mental, and social well-being. Workers felt like they had to keep up with the line like a machine and that they were not valued. This type of pressure is detrimental to the health and safety of the most important element in any workplace, the workers.

Changing the culture of an organization or that of an industry is a slow and complex process. It is evident that the safety culture of the meatpacking industry must be improved. There are a number of opportunities to improve the safety culture that flow from our findings. First, plants need to assume that workers are their most valuable resource. They should implement a "risk-aware" strategy to help counterbalance the constant focus on production and contribute to an increase in or development of safety awareness among management and workers.³³ Meatpacking facilities should ensure adherence to the minimum OSHA standards including, but not limited

to the Hazard Communication Standard (29 CFR 1910.1200), Personal Protective Equipment Standard (29 CFR 1910.132(a)), and Sanitation Standard (29 CFR 1910.141).³⁶ This would help workers to be more aware of the risks and proper protective measures plus allow for more humane treatment in the working environment. Second, because of the hierarchical structure of the plants, supervisors must be empowered to lead and ensure the safety of their workers. As such, supervisors should be evaluated on safety enforcement as a standard and essential part of their job. However, we understand that culture is created by both leadership and individual workers, therefore, focusing just on management and supervisors is insufficient to change organizational culture.⁴ Therefore, workers must be engaged in safety-related concerns. They should be involved in regular, ongoing, and task-specific training that is culturally and linguistically appropriate. They should be encouraged and incentivized to report incidents and near misses and provide input as to the potential causes, which may improve understanding and communication among different levels within the plant. Workers should have a mechanism to discuss specific risky tasks and find real solutions as partners in the organization. Finally, plants may also consider implementing safety climate assessments to understand specific safety behaviors, compliance, and training issues that need to be addressed, which over the long run may improve the safety culture.³⁷

Organizational culture oftentimes is also reflective of the greater society as depicted in Figure 1, and safety culture can be influenced by the regulatory environment.³⁸ Stronger safety standards and stiffer enforcement of current standards should be prioritized by the industry and by OSHA. In the United States, immigrant workers have been dehumanized through both policies and practices. Limited knowledge of labor rights, fear of retaliation, and threats of immigration-related consequences have left immigrant workers vulnerable to exploitation and coercion.²⁹ All workers should be provided, informed, and be able to access and navigate employment benefits such as health insurance, workers' compensation, paid leave, and collective bargaining protections.³⁹ Unfortunately, recent changes in policy implementation and granting line speed waivers for poultry processing facilities during the COVID-19 pandemic are yet another example of the limited concern for worker safety in this industry.^{39,40} Community and policy level changes such as living wages and comprehensive immigration reform could better protect workers and improve the safety culture.³⁸

This study has a number of limitations to note. First, only Hispanic/Latino workers were included. Although meatpacking plants in the study area primarily employ Hispanic/Latino workers, there are growing numbers of workers from parts of Africa and Asia. It is possible that diverse workers may have different perceptions of safety culture and that racial and/or ethnic group membership may influence perceptions of trust, communication, and care among workers and between workers and management. Because supervisory and administrative personnel were not included in this study, we present a perspective limited to just workers. Future research should explore these issues in depth with diverse immigrant and refugee workers employed in the meatpacking industry and include

not just line workers, but also supervisors and administrative staff. Second, only workers who reported musculoskeletal pain and limited physical activity outside of work were eligible to participate. Because of their health problems associated with work, they may have been more likely to feel negatively about the work environment. However, given the nature of responses and the consistency with previous reports on the working environment in these plants, we do not feel this is the case.

5 | CONCLUSION

Meatpacking is dangerous, dirty, and demanding work that engages the labor of structurally vulnerable individuals. The current culture promotes production over people, and workers often feel that they have to keep up with the speed of the line as if their bodies were machines. More must be done to protect workers. As such, addressing the critical role of supervisors, providing culturally and linguistically appropriate consistent safety training and messaging to the workforce, and enforcing and strengthening safety regulations are positive steps toward ensuring that organizational values and artifacts are aligned with a culture of safety.

ACKNOWLEDGMENTS

We would like to thank all study participants for sharing their perspectives with the research team. We would also like to acknowledge the support of the Latino Center of the Midlands, Comunidad Maya Pixan Ixim, and Crete Public Schools Special Programs for their assistance in promoting this study. This project was supported by the Nebraska Tobacco Settlement Biomedical Research Development Fund (NTSBRDF) 2018–2020.

CONFLICTS OF INTEREST

The authors declare that there are no conflicts of interest.

DISCLOSURE BY AJIM EDITOR OF RECORD

Paul A. Landsbergis declares that he has no conflict of interest in the review and publication decision regarding this article.

AUTHOR CONTRIBUTIONS

Athena Ramos: conceptualization, methodology, investigation, curation, formal analysis, and writing. **Marcela Carvajal-Suarez:** investigation, curation, formal analysis, and writing. **Natalia Trinidad:** investigation, curation, formal analysis, and writing. **Sophia Quintero:** investigation and writing. **Diana Molina:** writing. **Sheri Rowland:** conceptualization, funding acquisition, investigation, formal analysis, and writing. All authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ETHICS APPROVAL AND INFORMED CONSENT

This study was reviewed and approved by the Institutional Review Board at the University of Nebraska Medical Center. Participants provided written consent.

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How to cite this article: Ramos AK, Carvajal-Suarez M, Trinidad N, Quintero S, Molina D, Rowland SA. "No somos máquinas" (We are not machines): Worker perspectives of safety culture in meatpacking plants in the Midwest. *Am J Ind Med*. 2021;64:84-96. <https://doi.org/10.1002/ajim.23206>

APPENDIX

Focus group questions

1. Some people say meatpacking jobs are good jobs. What do you think? What makes them good or bad?
2. What do you specifically do each day at work? Can you describe your daily tasks?
3. How does your job affect your health?
4. Would you say that your job is dangerous? Why or why not?
5. As an individual, what could you do to reduce your chances for illness or injury at work?
6. What types of things does your employer currently do to help prevent illnesses and injuries at work?
7. What do you believe should be done to prevent work-related accidents, injuries, and illnesses in meatpacking plants?