ASSESSMENT OF LABOR RECRUITMENT & RETENTION CHALLENGES IN THE CATTLE FEEDING INDUSTRY

by

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A Thesis Submitted in Partial Fulfillment

of the Requirements for the Degree

MASTER OF SCIENCE

Major Subject: Agricultural Business and Economics

West Texas A&M University

Canyon, Texas

August, 2019

ABSTRACT

Labor management in the feedyard industry is a primary concern with beef demand growing and a higher percentage of young adults pursuing college and urban careers rather than rural jobs. In this analysis, several labor challenges within the cattle feeding industry are identified and investigated. As immigration policy floats back and forth in the political spectrum, feedyards continue to increase their reliance on immigrant and minority labor because of the decline of the native born American's interest in feedyard employment. Little research has been done to evaluate the differences between labor recruitment and retention in the cattle feeding industry, especially in Texas, Oklahoma, and New Mexico. This region is responsible for 28% of the nation's fed cattle production. An assessment of the challenges management and employees face is imperative and warranted.

In order to understand the gaps between the employer and the employee, two survey instruments were designed to create benchmark data regarding employee management as well as attitudes and perceptions of laborers. These surveys were used to understand the industry's struggles between feedyard general managers and feedyard laborers (any employee subordinate to the general manager). In order to generate the survey instruments, discussions occurred with four regional feedyard managers. In each meeting the managers expressed their concerns and the issues they encounter in recruiting

and retaining employees. Through the interviews, many challenges were discovered that feedyard mangers in the industry currently handle on a day-to-day basis.

Primary data elicited from feedyard general managers and feedyard laborers was evaluated and analyzed using chi-square analyses. Significant differences were discovered among different feedyard structures, sizes, departments, and ethnicities. The demographics, perceptions, and opinions derived from the feedyard work force was then utilized in ordered logit models to better understand the factors which impact not only the satisfaction of an employee, but also the likelihood of promoting this field of employment to their children.

ACKNOWLEDGEMENTS

With agriculture being a vital part of life, it's a truly rewarding opportunity that I have gotten to not just work with, but more importantly learn from, some of the best people in the industry. First and foremost, I thank God for giving me the opportunity to live out a dream of being on the road to becoming a leader in the agriculture industry. However, I would not be positioned for such great success if it wasn't for Dr. Mallory K. Vestal.

Dr. Vestal, I would like to thank you for the impact that you've had on my education and my life. From the first time you helped make my schedule as a freshman undergraduate, until providing the opportunity to be among the few to fulfill a project that will hopefully impact the industry in boundless ways, you have always supported my passion for learning and agriculture, and you have always pushed me to be the best I could be. Thank you for teaching me the importance of professionalism and challenging me to become the student you knew that I could be. I am forever grateful for the mentorship and friendship you have provided. I look forward to being a contact in the agricultural industry for higher education because of the fire you have fueled in my life. Once again, thank you for all the countless hours and thought you have invested into me over the years. I am very appreciative of the growth and development you have provided to my life.

Secondly, I'd like to thank Dr. Bridget Guerrero, Dr. Ty Lawrence, and Dr. Nancy Garcia for being a part of this project. Your knowledge and wisdom have truly aided in making this project logical and purposeful. To Dr. Guerrero, thank you for all the laughs and always bringing the stress down. You're peace of mind produced an avenue for clear thought and steady wisdom throughout all of my education. To Dr. Lawrence, you inspire me to push boundaries and think in ways that focus on helping the people we serve in the cattle feeding and beef production industries. Thank you for teaching me that hard work is rewarding, and education isn't given, it's earned. To Dr. Garcia, thank you for all your assistance, and sharing your knowledge. Without your translating assistance, our study would have been missing an imperative perspective from the cattle feeding industry. To all of my committee members, your passion for me as a student makes me appreciate, even more, the experiences and education I have received, and all qualities that the Department of Agriculture at West Texas A&M University brings to the world.

I'd also like to thank the Texas Cattle Feeders Association for their assistance throughout the entire project, and for their contributions to education and research. Thank you for investing in students like me, and thank you for serving such a fruitful industry.

Lastly, I would like to thank my family and friends. To my parents, Jan and Micky Robinson, and all my grandparents, without your love and support I would've likely never finished this degree and project. Mom, your encouragement pushed me to find purpose and vision, when it felt like there was no end in sight. Dad, your positivity, love, and constant reminder that, 'if it were easy, everyone would do it,' pushed me to fulfill my goals and dreams.

To my grandfather, Dee Allen, thank you for providing an example of what a man should be, and thank you for believing in me and instilling a love for agriculture in my heart. I dedicate this master's thesis to you. Thank you, for being an inspiration to my life.

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CHAPTER I

INTRODUCTION

Cattle feeding has been a central part of the Texas Panhandle economy for many years. According to the Texas Cattle Feeders Association (TCFA), raising cattle has been a part of the United States since settlers first arrived in Texas in the 1800s. However, cattle feeding in Texas, Oklahoma, and New Mexico, as it is now, has only been around for the past 60 years. The region is responsible for 28 percent of the nation's fed cattle production, and is a vital part of the local agricultural economy. Dating back to the 1960s, cattle feeders began to proliferate the area, and as a result the area has grown into the most productive beef cattle region in the country (TCFA, 2018). Due to the prevalent nature of the industry, researchers are actively involved with identification and assessment of challenges specific to cattle feeding.

One growing concern and area of interest is feedyard labor needs. Like numerous industries, labor is one of the most important assets in an entity's portfolio. Without a knowledgeable labor force, labor efficiency in the cattle feeding industry will decline. In 2014, Wagner et al. claimed that, the single most important factor limiting the growth of individual feedlots is the availability of quality employees. Bewley et al. (2001) defined labor efficiency as the ratio between labor inputs and their task productivity. As the

supply of willing and experienced feedyard labor declines, the associated efficiency will also decrease.

Statement of the Problem

Scott MacGregor, DVM (2019), puts it very plainly in a recent article published in Drovers magazine, by saying that the number one challenge of feedyards today is managing labor. MacGregor points out that his role as a veterinarian offers an invaluable point of view of a feedyard that may be obtained and shared with management in which the crews would unwilling to discuss directly. Acting as a middle man between the feedyard crews and upper management, he sees how a company can have inequities and unfairness in how management treats or tolerates the employees. This can lead to low job performance and high turnover (MacGregor, 2019). Seven years prior to MacGregor's input on the current state of the feedyard industry, Burt Rutherford, Senior Editor at BEEF magazine, also indicated that the employee pool has dwindled along with the level of those skilled and qualified to work in the cattle feeding industry. He goes on in his article to demand the inevitable need for ways to encourage longevity of feedyard employment (Rutherford, 2011).

Issues in the industry have arisen from the continual growth of feedyards and increased demand of beef. Nebraska feedyard benchmarks from 2015 show a 20% increase in capacity over the past five years with an average increase of 1,467 head per feedyard (Birch and Brooks, 2015). In addition, growth in the cattle feeding industry nationwide has gone from 12.9 million head on feed as of January 1st, 2014, to 14.3 million head on feed as of January 1st, 2019 (USDA NASS, 2019). However, along with extensive industry growth and development, it is recognized that agriculture as a whole

has created a cultural lag. In 2018, Durst et al. examined farms within the dairy industry. They concluded that operations with effective employee management had a sustainable competitive advantage. However, when it came to citing three goals of the operation, there were differences among owners, managers, and employees.

To further exacerbate the challenges, communication in the feedyard industry is highly dependent on verbal communication. This primary issue arises between Latino and English-speaking employees. Ramos et al. (2018) stated that nearly half of the labor force in feedyards was comprised of immigrant labor in the United States. Additionally, immigrant laborers were less likely to receive training and important information because of their English speaking deficiency (Ramos et al., 2018).

While these studies indicate broadly the foundation of employment problems, there is a lack of identification of specific difficulties in the cattle feeding industry. This lack of research in feedyard personnel management has led to persistent challenges managers face in their roles. A better understanding of managers' and laborers' perspectives can be gained through the identification of similarities and differences which may exist. Thus, an assessment of these challenges is relevant and applicable to the industry.

Study Area

The focus of this study is in the TCFA region which is comprised of the Texas Panhandle, Oklahoma, and Eastern New Mexico. This area is known for its cattle feeding contributions to the beef industry. According to the National Agriculture Statistics Service (NASS), this area had a combined 2.98 million head on feed in 2018. Birch and Brooks (2015), stated that there are approximately 1,095 cattle on feed per each full-time

employee. Therefore, it is estimated that this feedyard region employs approximately 2,721 individuals.

Objectives

Within this study, feedlot labor challenges are recognized, identified, and confirmed. This project seeks to discover specific characteristics of feedyards that experience elevated levels of turnover and labor shortages. Very little research has been done to evaluate the specific challenges of labor recruitment and retention in the cattle feeding industry. This study provides an assessment of the challenges and perceptions from both management and employees within the feedyard. With the identification of challenges as well as areas of employment satisfaction, the industry will be better equipped to build a skilled, effective, and efficient work force.

The primary objective of this study was twofold. Initially, labor challenges feedyard managers commonly identify as well as their attitude and perception in regards to managing employees were assessed. Secondly, a clear assessment of the perceptions and attitudes in respect to feedyard labor directly from feedyard employees currently working in the industry was obtained.

This evaluation of feedyard management as it relates to recruiting and retention of ideal employees can assist in the development of a long-term feedyard employment relationship, and continue the development of an efficient and effective skilled labor force for the future. Given the declining state of the rural labor supply, this study provides valuable results and validity to the growing concerns across the cattle feeding industry.

By coupling primary data from feedyard management and feedyard employees, differences and similarities in attitudes and perceptions can be identified. Findings can be used by feedlot operators throughout the industry and beyond the Texas Panhandle in their labor recruitment and retention plans. First, it will highlight a feedyard manager's perspective on the issues in today's cattle feeding labor market. Secondly, the study will reflect labor personnel responses to management, their jobs, and the motivating factors behind their employment.

This research discovers and identifies key areas where managers face difficulties recruiting, hiring, and retaining employees as well as the demographics, backgrounds, attitudes, and perceptions of feedyard laborers. While no two feedyards are the same, this project is directed toward specific management practices and perspectives in order to identify challenges within the industry. This study couples both management and laborer perspectives with the goal of creating new innovative management techniques to sustain the longevity and productivity of employees. The overall objective of this study was to determine and identify the human resource challenges in recruiting qualified laborers and managers,

Secondary objectives included:

- Assess management challenges by feedyard type (corporate vs. customer),
- Understand motivating forces which attract managers and laborers to feedyard employment,
- Ascertain the factors which are most likely to influence satisfaction of laborers,
- Summarize demographics and backgrounds of current employees in the feedyard industry, and

- Determine factors affecting the attitudes of employees and their subsequent recommendation of feedyard employment.

CHAPTER II

CONCEPTUAL FRAMEWORK

In the area of production agriculture, an assumption can be made that labor demand is increasing, and the goal of a manager is to manage all assets in the most efficient way possible, including a company's human capital. Ramlall states that when an organization loses an essential employee, the knowledge that employee obtained is also lost. When an entity losses assets, its value also decreases, because now there are direct and indirect costs associated with the loss of that person (Ramlall, 2004).In the feedyard industry, this is no different. Employees who work in this industry have knowledge, experience, and skills which provide value. Retaining quality employees is critical to the profitability of an organization. Cattle feedyard managers must recognize the importance of essential employees and understand the value they add to the animals that are fed.

In this study, the cattle feeding industry's labor force is analyzed to assist feedyard managers with understanding what it is comprised of and to see the value their employees bring to the success of their respective operations. There are many different demographics, perceptions, and opinions managers and laborers have towards their occupations; however, this study, attempts to bridge this gap by discovering what factors affect employees' morale. Every manager faces their own independent challenges, but the industry as a whole is faced with challenges in the realm of human resource management.

Thus, this research assesses feedyard general managers, other feedyard employees, and their respective differences and similarities among these two groups.

CHAPTER III

LITERATURE REVIEW

General knowledge of demographics, perceptions, satisfaction, and challenges about retention and recruitment in the cattle industry is not largely found within the literature. In many different industries, there are publications that address human resource management, which is how the literature categorizes recruitment and retention. For the purpose of this review, the current benchmark data from Nebraska feedyards is used as a basis along with the modern feedyard composition as well as the relationships of similarities that are found in other sectors of the agricultural industry. Lastly, a review of human resource management practices and results of successful management skills that have been identified to make a significant positive impact on recruitment, retention, and employee turnover for other industries are evaluated as a means to better understand the underlying difficulties found in feedyard labor.

Modern feedyards are socially compared and separated by two different feedyard types. Although countless variations exist, the two general types of yards commonly observed are corporate feedyards and customer feedyards. Largely similar in many of their daily activities, the major difference exists in the ownership of the cattle on feed. Within the corporate structure, the feedyard corporation owns the majority, if not all, of the cattle within the feedyard. These yards are typically characterized by a larger feeding

capacity. Contrarily, the custom feedyard is providing custom feeding to multiple cattle owners. Within the custom feeding structure, the feedyard is generating income from yardage, while within the corporate structure, the income is largely generated from two distinct business units. One business unit owns and operates the feedyard while a separate business unit owns the cattle. These structures generate profits from yardage, feed, and cattle. Birch and Brooks (2015) collected primary data from feedyard managers within the state of Nebraska in order to assess responses across time. The authors focused on establishing benchmarks and identifing historical trends within feedyard labor. The authors understood that there is a need for feedyard managers to be competitive in wages and benefits in order to attract quality employees in what can be a thin market (Birch and Brooks, 2015). Cattle on feed numbers in Nebraska are closest in comparison to Texas and the TCFA region; therefore, with the lack of current feedyard benchmark data for the Texas Panhandle, Nebraska serves as a suitable point of reference.

Results from the survey discovered that between 2010 and 2015, the feedyard industry increased in the number of cattle on feed, while simultaneously the ratio of cattle per employee increased. This ratio is used as a discernment of the overall efficiency of labor in the cattle feeding industry; therefore, the more cattle a feedyard can finish with less people, the better overall efficiency of the feedyard. Authors note that 59% of the cattle fed in the surveys were company owned cattle, with the remaining 41% customer owned cattle. Small feedyards (< 4,000 head) owned approximately 75% of their cattle on feed, where large feedyards (< 12,000 head) were commonly split evenly between company owned and custom. Respondents stated that an average of 40% of yardage fees was allocated to labor. Yardage, included the fees billed to feedyard customers on a per-

head per-day basis. On average, 40% of yardage is used for labor. This confirms the dependency of the cattle feeding industry on employees, along with the need for their vocation throughout the industry (Birch and Brooks, 2015).

The average number of employees per feedyard increased from 10.36 to 15.31 between 2010 and 2015. In the analysis of results, the authors discovered that there was a positive correlation between written job descriptions and feedyard size. Similarly, a positive correlation was reported between the number of annual performance reviews and feedyard size. This suggested that there were more formal employee feedback systems at larger feedyards when compared to yards with less than 12,000 cattle on feed (Birch and Brooks, 2015).

In an effort to identify the difficulties a feedyard manager experiences, respondents were asked to rank the most common hiring challenges faced in 2015. The number one challenge managers faced is the lack of work ethic in their employees. Second and third were lack of required skill sets and attracting people to rural areas, respectively. Providing higher salaries and benefits than competing employers ranked fourth and fifth among the top challenges feedyard managers faced. However, in virtually every category of compensation, the total level reported indicated an increase from 2010, but the overall average value of benefits was lower than the previous report. Given the current reliance on human resources and the amount of capital it requires to secure enough labor to generate production, the authors from Nebraska noticed an increasing trend in labor costs. This was accompanied with the general challenge of finding willing and skillful employees. Although an increase in labor costs and associated labor challenges were identified, there are also indications that feedyards are increasing their

labor efficiency with an increase in the cattle to employee ratio. This provides room for growth and future development of the industry as a whole, as long as demand in the market continues to grow as well (Birch and Brooks, 2015).

Wagner et al. (2014) described the modern feedyard as a complex system dependent on technology and managed by a general manager. These general managers handle several of the daily responsibilities such as: cattle procurement, cattle marketing, feed procurement, facilitation between consulting veterinarians and nutritionists, and the human resource management of all the feedyard's employees. Feedlots are typically separated into five departments across the operation. The purpose of this distinction is to allow for improvements to production efficiency through the specialization of management and labor resources. This model is not strictly followed across all feedyards. Some feedyards combine two or three of the departments into one. The five departments which make up a feedyard include: general administration (office) department, cattle department, yard department, feed mill department, and feed distribution department (Wagner, Achibeque, and Feuz, 2014).

General Administration Department (Office)

The general administration department is responsible for the administration functions of the operation. At least six days a week a feedyard will be receiving feed, raw commodities (to be included in feed), and cattle. If the feedyard is responsible for the procurement and marketing of the cattle, this department is responsible for records and accurate tracking of cattle purchases and sales. Also included within this department is customer billing, accounts payable and receivable, employee payroll, and human resource benefits (Wagner, Achibeque, and Feuz, 2014).

Cattle Department

Health care and husbandry are the primary goals of the cattle department. This department is typically filled with several functions divided between three primary roles including the shipping and receiving of cattle, pen riding, and doctoring. Personnel on the shipping and receiving crew assist when incoming cattle arrive by unloading, weighing, and verifying the number of cattle received are accurate and are in acceptable condition. This department also assists in relocating finished cattle from their respective or "home" pens to the loading pens to be weighed and shipped for harvest. Pen riders spend the majority of the day on horseback, ATV, or walking through the feedyard assessing the health of cattle, and identifying animals which need medical attention. After the identification of these cattle, the feedyard veterinary technicians, generally referred to as doctors, then assess the animal and administer proper medical treatment. These treatments are prescribed by a licensed veterinarian (Wagner, Achibeque, and Feuz, 2014).

Yard Department

Yard department crew members are responsible for feedyard maintenance and repairs. Employees within this department possess the skills to operate machinery and heavy equipment. They assist by making sure cattle have proper functioning water fountains in their pens, by removing manure from pens, and maintaining fences, gates, and feed bunks. All maintenance and repairs done by these employees are vital for smooth operations of the other departments (Wagner, Achibeque, and Feuz, 2014).

Feed Department

Feed delivery, bunk management, and feed truck maintenance are all responsibilities of laborers in the feed department. Generally cattle are fed two to three times a day, and these employees are responsible for feed distribution. Every morning, each pen's feed bunks are inspected to determine the amount of feed to be distributed for that day. Employees are responsible for logging the proper amount of feed into a record-keeping system. With technology, most feedyards have transitioned from manual record-keeping to an automatic record-keeping software which is installed in the vehicles to more accurately keep track of daily feed delivery. Preventative and routine maintenance on feed trucks are carried out by the drivers at the end of each day or as needed (Wagner, Achibeque, and Feuz, 2014).

Mill Department

Within the feed mill, employees focus on the conversion of raw commodities into proper feed rations which will subsequently be delivered to cattle by the feed department. These employees are responsible of processing feed grains and taking care of the minute details of each feed mixture to form different diets. In addition, this department is responsible for all maintenance and functionality of the equipment within the mill.

Human Resource Studies in Different Agricultural Sectors

Managing human capital has become a large challenge within many agriculture sectors. Bitsch and Olynk (2008) noticed this and evaluated livestock managers, owners, and middle-managers in the pork industry via focus groups to observe common risk-increasing and risk-reducing human resource management practices. The researchers reported that performance management, or the informal interaction with employees

which happens on a day-to-day basis, was the area managers focused on initially when asked about human resource management. These included tasks such as assigning tasks, keeping the work process flowing, and overcoming problems. Understanding how to motivate and communicate with employees was key to reducing risks of turnover or low productivity. Managers stated that, "Showing employees that the job is important and exciting, portraying a positive attitude, regularly sharing information with employees, and involvement with goal setting" were skills and tasks associated with having greater performance management. Secondary and tertiary issues managers perceived to be concerned with was compensation and recruitment (Bitsch and Olynk, 2008).

In 2006 Bitsch et al. examined the dairy industry within dairy focus groups. Participants reported that recruitment and selection were a top concern of owners and managers. Lack of skills in the applicant pool coupled with a lack of commitment to the selection process led to multiple poor hires which further exacerbated work environment challenges. Throughout the discussions, the team discovered that employee selection problems coupled with inadequate training of employees led to low performance, commitment, and loyalty. In addition, these negative characteristics were believed to lead to a decrease in job satisfaction and motivation; which, results in the failure of meeting farm goals (Bitsch et al., 2006).

In a study conducted by Durst et al. (2018), the authors noticed a discrepancy in communication of goals, expectations, and feedback between owners and managers and between managers and employees on large dairy farms. Furthermore, the researchers stated that when employees are evaluating practices and examining ways to improve the business, it is clear the laborers are invested and care about the success of the entity and

their respective role. When employees do not represent this attitude, and instead show disengagement, it is a direct result of management actions, words, and attitudes. Therefore, recognizing the mindset of an employee can be a competitive advantage, and can provide the greatest benefit for employers (Durst et al., 2018). In the same study, employees were asked to respond to specific job related questions using a Likert scale from one to five. The most positive responses were indicated with a five and the most negative a one. Mean employee responses by farm were taken and compared to the mean manager responses to determine if there were any statistical differences. Differences were then identified among the farms using the Kruskal-Wallis test for the Likert scale questions (Durst et al., 2018). Results from the employee responses indicated dairy farms were scored more negatively by the employees in performance feedback, particularly positive feedback, with a mean of 3.13. In addition, the voluntary open-ended responses reported that 22% of the comments were similar to the negative perception of poor management feedback. This shows the importance of a positive attitude and warrants a study for better human resource management skills among the laborers. In addition, training and open communication scored more positive to employees following feedback, with means of 3.31 and 3.34, respectively. Lastly, the fourth lowest scored response by employees was the communication of goals with a mean of 3.95. Through the poor rankings of what is important to employees, Durst and colleagues confirmed their hypothesis that there are common areas where managers struggle with human resource skills, and this is a weakness (Durst et al., 2018).

Differences between employee perceptions and manager perceptions were observed. Significant differences showed that employers thought that employee

satisfaction was lower than what employees reported, and interest in learning was significantly more than the employers' perceptions. In addition, the same was reported for employee commitment to the success of the farm and the value employees placed on relationships with their supervisors. On the other hand, there were three areas in which managers overestimated the employee's perspective. Managers perceived themselves giving praise and recognition more than the employees did, and managers also thought that the frequencies of training to improve skills were offered more than perceived by the employees. Lastly, a difference was observed between the manager's perspective and the laborers' on the adequacy of proper tools and equipment to complete tasks. Management felt as though the tools and equipment were adequate while the employees disagreed. These results validate the lack of understanding and communication which exists between managers and employees. Furthermore, the study demonstrated the opportunity for managers to improve communication with employees and gives managers perspective and insight as to the strong passion employees have for their position (Durst et al., 2018).

In 2015 a cultural lag was identified in the dairy industry by Erskine, Martinez, and Contreras. In order to evaluate managers and employees, a survey deemed Human Resource Survey (HRS) was designed to describe the management culture of farms. The instrument used 16 questions focusing on milk quality goals, communication, training opportunities, problem resolution, and management style of the owners and farm managers. In addition, following the HRS, five focus group discussions were conducted: three groups with employees, one group with managers and owners, and one group of veterinarians. This method was done to gain a better understanding of the attitudes and perceptions of the project as a whole. Assessing somatic cell count (SCC) was used to

evaluate the common understanding and knowledge of company goals. Somatic cell count is a measurement that is used to assess milk quality produced from dairy farms. Therefore, dairies tend to have a SCC goal in order to produce high quality milk for consumers. Erskine et al. (2015) evaluated the knowledge and training of herd SCC goals by using Fisher's exact test to compare frequencies between Spanish and English-speaking employees. When employees were evaluated on the knowledge of SCC goals, a significant difference was observed between English-speaking and Spanish-speaking employees. The study reported that 87% of English-speaking workers agreed with the goal set by management, and only 41% of Spanish-speaking workers agreed. As for training, 11 out of the 12 managers stated that they directly provided training to workers on the farms. While only 29% of all employees responded with having received training from management. After examining by language, a difference was observed when only 14% of Latino workers reported they learned from managers or owners compared to the English-speaking employees at 42% (Eskine, Martinez, and Contreras, 2015).

The gap between the communication of goals and training is evident, but the authors also identify a gap in education. The study reported that 49% of the employees surveyed had never received education about mastitis control, and a mere 16% received education on a regular basis (Eskine, Martinez, and Contreras, 2015). To compare, in the study by Durst et al. (2018), when employees were asked about the frequency of training to improve skills, laborers indicated that they had not received much training. Common answers were "only when I started" or "never", whereas the majority stated that training was offered less than once per year (Durst et al., 2018). Erskine concluded that when considering employee turnover as a problem and challenge for many farms, there is a

need for effective and consistent communication, training, and education. The authors noted an abundance of common misinterpretations, misperceptions, and miscommunication in the sector of large animal agriculture as a result of this study (Eskine, Martinez, and Contreras, 2015).

In another study focusing on feedyard employee safety for Latino immigrant workers, Ramos et al. (2018) reported that 72% of the 68 participants had less than a high school education. In addition, the mean age of immigrant Latino workers was 39 years old, and 62% had little English proficiency. Despite the potential educational and language barriers cited, nearly 90% of the employees desired to learn more about health and safety issues through in-person Spanish training. In an open-ended question, all laborers reported safety as being important. Several reasons were noted including: the ability to continue work, avoid injury, and support families or dependents. This gap emphasizes the importance for managers to understand all employees, no matter their primary language. An employee's desires to learn more in order to fulfill personal and vocational needs are important, and this importance is cited continuously throughout literature as a method to improve the attitudes, motivations, and productivity of laborers (Ramos et al., 2018).

Along with the lack of knowledge concerning the labor sector of the cattle feeding industry, a study organized to evaluate the expected monetary value and utility that feedyard managers place on specific characteristics of potential assistant manager applicants was conducted by Smith (2004). Mail survey distribution was utilized to discern the values placed on theoretical applicants to examine the differences in the willingness to pay for different levels of education, experience, and specific areas of

expertise. Attributes were selected based on general knowledge of the variables commonly impacting salary in the industry, as well as through discussions held with feedyard operators (Smith, 2004).

Through the respondents ranking of four different levels of each attribute, a utility function was developed, and a feedyard operator's willingness to pay was derived for the different applicant attribute combinations. In the study, Smith discovered that feedyard managers preferred applicants who have more experience and education. Additionally, managers also preferred expertise in animal health over nutrition, agricultural economics/marketing, and personnel management. The author concluded that managers' preference regarding experience has decreasing marginal utility. Therefore, the marginal utility is largest between potential applicants with zero years of experience compared to less than two years. Thus, an employee who has less than two years of previous experience was roughly $4,000 more valuable than compared to an employee with two to four years of experience. Furthermore, personnel management was ranked as the least preferred attribute among the four areas examined. Since personnel management was the lowest preference among managers, it could be concluded that there are deficiencies of human resource management skills throughout the industry due to the fact that managers are not seeking these qualities and skills out in the hiring process. This leaves the industry with a deficit and a consistent challenge to retain essential employees and recruit skilled and qualified employees (Smith, 2004).

Even if all these discrepancies are a result of problematic employees and unrealized self-awareness of feedyard managers, there are some underlying causes that could be creating these effects. In a synthesis of employee motivation theories, Ramlall

(2004) explained how underlying employee motivations affect the retention and behaviors of employees within an organization. Ramlall acknowledges that in today's highly competitive labor market, all kinds of organizations are facing difficulties in employee retention. With human labor and knowledge recognized as firms' most valuable assets, it is important to understand how to increase the longevity of those assets by utilizing key theories of motivation in order to create a sustainable environment for the organization (Ramlall, 2004).

Many theories of motivation exist; however, there are four which are strongly related to the commitment and enhancement of employee labor. A manager's ability to understand and incorporate these theories into their employee management program could enable a feedyard to increase their competitive advantage in the competitive employee labor market. The four theories are: need theory, equity theory, expectancy theory, and job design model (Ramlall, 2004).

Need theories attempt to identify internal factors which energize and motivate positive behavior. Needs can be physiological or psychological deficiencies, weak or strong, and influenced by the environment. Ramlall cites Maslow's Need Hierarchy Theory by stating humans aspire to become self-actualizing, realizing one's full potential. In addition to self-actualization, Maslow believed in four other areas of basic needs: physiological, safety, love, and esteem. Therefore, if managers can develop a method to motivate their employees with programs and practices that focus on satisfying these basic needs, then implementation through stress and challenging times helps the employee develop into their fullest potential (Ramlall, 2004).

Secondly, the equity theory recognizes an individual's concern to be treated fairly. This usually is referencing the employee's input–output ratio, and is determined by learning during the process of socialization and comparison between the inputs and outputs of others. Furthermore, there is a relationship between an employee's effort or performance and the amount of pay an employee receives (Ramlall, 2004). Employees can allow this unbalancing perception to produce tension, thus motivating them to act. For example, in one conversation with a feedyard manager, he explained the hesitancy to promote or reward an individual due to their performance. The manager then stated that once an employee is rewarded and the employee tells his coworkers, then all the employees feel as if they should be rewarded because they expect their input to receive the same output. In this case, employees' frustration will lead to requiring the employer to increase wages for everyone, or employees would leave due to an unfair perception of the balance between their wage and their performance.

A third theory that affects motivations of employees, is the expectancy theory. This theory states that people could be motivated simply to behave or act in such a way that will produce a desired, expected outcome. Pinder's (1984) rendition of Vroom's Original Theory, states that a person's behavior results from conscious choices which are systematically related, particularly to the perception derived from the beliefs and attitudes of the individual. The expectancy theory has also been linked with employee job satisfaction. In the literature, when predicting job satisfaction it is determined by the relationship between the equity of the rewards and the employees' respective perception of that equity in relation to performance. When the perception of the expected equity received is less than the performance given, a negative employee experience results and

lessens employment satisfaction. Lastly, job design is a motivation theory which states that the job tasks themselves are the key to employee stimulus and satisfaction. Boring and monotonous tasks stifle motivation of employees and halts the desire to perform well (Herzberg, Mausner, and Snyderman, 1959).

In the mid 1950's Frederick Herzberg developed a theory which suggests factors that link job satisfaction are independent of the factors linked to job dissatisfaction. This theory is known as the Motivator-Hygiene theory. Through this survey, Herzberg noticed that employees described satisfaction in terms of intrinsic values, and he noted them as "motivators". Among the motivators are variables such as achievement, recognition, the work itself, responsibility, advancement, and growth. As for the dissatisfying experiences, these were noted as "hygiene" factors and mainly result from extrinsic, non-job-related factors. Examples of the negative hygiene factors are referred to such as company policies, salary, coworker relations, and supervisory styles.

Herzberg concluded that when focusing just on elimination of the negative hygiene factors, the best outcome was that of neutral satisfaction. In order to accomplish increased satisfaction, it would depend on the results of enhancing the motivators of a given job. Ramlall concluded that, in essence, there is much more to a manager's role than just bringing forth peace and contentment through compensation and good working conditions. In fact, motivation will not be attained through the bare minimum but through the enrichment of an employee's job through achievement, recognition, stimulation, responsibility, and advancement (Ramlall, 2004). Human resource management practices may be suited best for success when built from theoretical origins and combined with retention efforts to satisfy the needs of the employees.

When it comes to managing human assets, Coff (1997) stated that in order to build a competitive advantage with these assets, organizations need to realize they are often hard to imitate due to scarcity, specialization, and tacit knowledge. Relative to the feedyard industry, this is applicable because employees are difficult to find and duplicate, given the inability to fully understand and observe the key desirable attributes of a sustainable employee. In Coff's analysis of human assets and management dilemmas, it was noted that specific attributes make employees strategic assets but also make them difficult to manage. By focusing on employee's assets specificity, social complexity, and casual ambiguity, management is caught in human asset dilemmas, and in which there are some areas that coping strategies can be applied (Coff, 1997).

In the literature, specific human assets refer to special knowledge, skills, and relationships that may only be useful in specific firms. Human assets pose a different risk to firms than general assets, due to the reason they can become unsatisfied, feel underpaid, or simply unmotivated to work in general and then freely leave their employment. This increases risk of turnover, the loss of critical assets, and tacit knowledge. However, it also leads to social complexity (Coff, 1997).

According to Coff, there are two forms of social complexity, external and internal. External refers to the outside organization connections. An example of this would be a feedyard manager's connection with a veterinarian, or even more risky, a feedyard laborer's relationship with another manager down the road. These boundary-spanning networks may create challenges with teams, upper management, or customer-supplier networks. However, it can also aid information and knowledge transfer from outside the organization but risks bringing in awareness of outside opportunities. Through

the complexity, Coff notes that it leads to casual ambiguity, which may be hard to imitate and duplicate for competitors (Coff, 1997).

Internal social complexity leads to other issues within casual ambiguity such as serious information loss, which fosters in team production. Team production is a general practice in the feedyard industry, where many employees work in team settings. This also creates a challenge for managers to observe individual performance and contributions, where employees may receive incentives for work not done and may receive blame for mistakes made without having any control. Coff noted that external social complexity leads to threats of turnover, but internal social complexity leads to more information dilemmas with adverse selection/hiring, moral hazard/motivation, and bounded rationality/poor decisions. Adverse selection/hiring relates to a disproportionate number of low-quality workers; in which, offering low wages to bear this risk leads to employees being reluctant to find better jobs. Moral hazard/motivation is tied to Maslow's theory suggesting that the decline in motivation may be due to a team member's perception of the less impact they have with their given effort. Lastly, managers may be bounded to rationality due to the lack of information sought, and the unawareness of employees knowing what information to provide.

Managing human assets is challenging due to the assumed goal that a feedyard desires to have a competitive advantage; however, through turnover and information dilemmas, managers may struggle with being aware of strategies to combat the ongoing issues. It is believed that firm policies can be utilized in order to cope with the continual challenges faced with these common struggles. Coff stated four categories where operators can build policies to assist managing the risk of losing employees and

information. These categories consist of: retention strategies to build employee satisfaction, sharing profit to withhold essential employees, develop organizational design strategies to influence new culture and structures, and build information strategies in order to gain advantages (Coff, 1997).

Controlling turnover is an essential skill manager's need in order to sustain or create competitive advantages in the marketplace. Coff refered to retention strategies as strategies that boost employee longevity without allocating economic profits. In the literature it is acknowledged that perceptions and comparing one's current job with the alternatives of another will determine a person's propensity to change jobs. Therefore, to reduce labor turnover, firms can either improve perceptions of an employee's current job, or decrease the perceptions of the alternatives. In general the Job Descriptive Index, which measures facet job satisfaction, has five dimensions of satisfaction: 1) pay, 2) supervision, 3) coworkers, 4) promotion, and 5) the work itself. By removing the financial facet, nonfinancial facets offer more opportunities to boost satisfaction in other areas that may require funding initially but once in place are sustainable by themselves (Coff, 1997).

Coff suggested improving satisfaction within the supervision realm by creating employee participation, recognition, and sustaining fairness. Managers can also train and select people to provide training and learning opportunities for other employees. Other methods to build greater satisfaction could be increasing the management of group demography and creating social activities to build a team-based environment, something already found in some feedyards. In addition, managers and operators can strategically enhance promotion by developing career paths that rewards employees with assignments.

Lastly, boosting more autonomy and ability for employees to incorporate their ideas into their job can increase the motivation and in turn satisfaction (Coff, 1997).

Other strategies for managing turnover is through different types of rent sharing practices. The benefit of rent sharing is that it can align organizational values and employee values. Generally, rent sharing occurs through increased compensation, which can set a premium above competitors for an employees' wage. This then causes a deficit in income when the employee seeks other employment in the market. Additionally, organization-level profit sharing such as long-term incentives and stock ownership can influence decision making as well. Other forms of profit sharing may be best suited at the group, or team, level. Here it may be difficult to ascertain information on individuals, thus creating an opportunity to incentivize the positive outcomes from a group setting. Lastly, individual profit sharing is feasible under situations where more information is known and responsibility is held, but if there is less knowledge about individual influence on outcomes, it will be less useful to retain employees (Coff, 1997).

In situations where profit sharing is not feasible, managers and operators can seek to improve the organization's design through competitively advantageous strategies such as shared governance, organic structure, and corporate culture. According to Coff (1997), shared governance is similar to participation, however, it is intended for groups focusing on broader scopes and issues, instead of individuals, such as a grass roots strategy for making a critical decision. Organic structure also focuses on the group, or team-production, in which structures are designed to accommodate social complexity with more lateral face-to-face communication. Lastly, corporate culture is a means of coping and dealing with turnover and inadequate information. Corporate culture is known as

common values, beliefs, and norms held within a firm. Obtaining a strong culture can be advantageous in reducing employee turnover, due to employees worry the culture they are accustomed to cannot or will not be similar within a new firm (Coff, 1997).

Coff concluded his analysis by discussing ways that firms can focus on coping with turnover through information strategies. Discrepancies in information may lead firms to struggle insufficient opportunities and poor decisions. Therefore, according to Coff, a firm must seek specific types of information in order to mitigate the problems of moral hazard and adverse selection. Several methods of informational gathering can be done to assess and cope with moral hazards such as: increased supervisor monitoring, peer/subordinate feedback, and external information sources for evaluating employees. On the other hand, externally, methods can be established to enhance firms' ability to adhere with adverse selection in the labor market. Firms able to identify key human assets with limited knowledge could lead to gaining a sustainable competitive advantage. Such practices that could be useful for managers may be: limiting the exposure to the external market by hoarding employees through internal promotions, gaining competency through better interpretations of the labor market and its signals, and by improving the ability to identify talent and productivity based on limited information (Coff, 1997).

In the area of improving labor productivity, Koch and McGrath (1996) studied the effects human resource management policies have on productivity in an entity's work force. They suggest investing in human assets is as valuable to a firm as investments in their physical and general assets. Therefore, just as management and organizations implement strategic plans and practices for advancement of a firm's general assets to gain a competitive advantage, the same should be invested in managing human resources in

order to gain an advantage in human productivity. The researchers also hypothesized that human resource planning sophistication, investments that increase productivity-related information about applicants in the hiring process, and investments in employee development will all have a positive impact on labor productivity (Koch and McGrath, 1996).

In the analysis, human resource management data was derived from a larger survey conducted at the Columbia University Graduate School of Business, where a survey was sent to 7,765 executives across several industries. Industry groups represented in the data were from agriculture, mining and construction, finance, insurance and real estate, manufacturing, transportation and communications; wholesale and retail trade, and services. Labor productivity was evaluated as the dependent variable by dividing the number of net sales by the number of employees. Investments in planning, investments in hiring, and investments in employee development were the independent variable measures.

Through regression analysis, several practices indicated a significant difference to labor productivity based on the ratio of net sales per employee. Firms that were capital intensive, which the authors defined as the ratio of assets to number of employees, consistently had a significant effect on the dependent variable when interacted with the independent variables of investing in planning and hiring. This supported the first two hypotheses. Koch and McGrath (1996) argued that in the more capital intensive firms, organizations that invest more on the 'front-end' of their human resource functions, and take a proactive stance, tended to yield better labor productivity. In addition, these firms were also characterized as being more exposed to a higher potential for poorly chosen

employees to do significant harm. As for investing in employee development, their research reported that firms investing more into training and development for its employees tended to enjoy more rewards of a more productive workforce (Koch and McGrath, 1996).

In conclusion, feedyards are very labor intensive, and research shows there are several discrepancies between managers and laborers on many fronts such as communication, perception, and the relationships that entice laborers in the roles. Based on theory, there are many different methods managers can stem and develop positive practices that could in-turn produce more satisfied and productive employees. However, in the case of feedyard labor, there is a significant lack of literature and understanding of the general demographics and summary statistics within the workforce of the industry. Therefore, this study next explores the methods and the procedures taken to obtain the findings of our research study that focuses on common challenges amongst managers in the feedyard industry and compare the differences amid the laborers' perceptions and their relationships with their employment.

CHAPTER IV

METHODS AND PROCEDURES

General Approach

A primary survey was developed and deployed to feedyard general managers and operators in order to form a more unified analysis of the concerns and challenges seen in the industry. A secondary survey was developed and deployed to feedyard laborers in order to understand and obtain a more accurate perception employees have towards their vocation. Both survey instruments were approved by the Institutional Review Board (IRB) at West Texas A&M University in 2018 (WTAMU IRB#02-03-18 & WTAMU IRB#02-11-18). Questionnaires and all survey materials are included in Appendix A.

In order to better determine the challenges in the feedyard industry, four in-person interviews were held with feedyard managers throughout the Texas Cattle Feeders Association region. These interviews aided the research team in understanding the feedyard population as well as the relevant challenges feedyard operators are facing. In the fall of 2017, two corporate feedyard manager interviews were followed by two customer feedyard manager interviews. The goal of these discussions was to develop necessary questions in order to properly explore the causes and effects of labor management challenges and practices. Through these interviews, a survey instrument was developed based on their feedback. Developed using Qualtrics Survey Software

(Qualtrics, Provo, Utah, USA), the instrument was designed to determine the difficulties managers experience across the TCFA region.

The primary focus the manager's perspective of feedyard labor and understanding the challenges managers face. Although differences existed in the feedback, similar challenges were evident. All managers faced difficulties in similar areas, and it was apparent that managers do not struggle with recruiting and retaining employees in every department across the yard. Feedyard operators' struggles were discussed in more specific areas according to the different departments in a feedyard.

In general, there are five departments in each feedyard. There is the general administration (office) department, which makes up the clerical portion of feedyard. The mill department, is responsible for making all the feed and mixing rations from raw commodities for the cattle. The feed department, is responsible for delivering feed to all the cattle in the feedyard. The cattle department, is responsible for shipping, receiving, doctoring, and the daily movement of cattle throughout the yard. Lastly, the yard department is responsible for maintaining the physical infrastructure of the feedyard such as pens, alleys, water tanks, and feed bunks. Many feedyards separate employee responsibilities by dividing it among the five different feedyard departments. Even though each department has its own responsibilities, all five work together in an efficient system to produce healthy, wholesome cattle to be processed for beef.

After engaging with the feedyard managers, their main concerns were identified as pertinent issues. The three key points were:

- Concerns with the hiring and retention difficulties at a department level,

- Determining what methods effectively recruit, retain, and incentivize employees, and
- How to build the feedyard culture to facilitate positive growth and sustainability.

Manager Survey

These areas of interest provided the basis for the survey instrument deployed to feedyard managers within the TCFA region. The management survey (Appendix A) was designed and deployed through the Qualtrics Survey platform. It consisted of 60 questions and took an average of 22 minutes for each manager to complete.

Data & Analysis

In November 2018, TCFA sent an invitation email to 197 feedyards, soliciting their participation in the study. The feedyards were located across Texas, the Oklahoma Panhandle, and eastern New Mexico. A follow up email was sent during the second week of December 2018. Upon completion, thirty useable responses were received, yielding a 15.2% response rate. Of the thirty, eight responses were corporate, while seventeen were customer feedyards, and five were left unidentified.

Survey responses were recorded and analyzed specifically by question type. Means and frequencies were generated for demographic information as well as recruitment and retention difficulties. Data was analyzed across feedyard type (corporate vs. customer) and subsequently examined to determine if significant differences were present.

A brief summary of the data set and its respective descriptive statistics obtained by the manager survey appears in Table 1. Full analysis and results are included in Chapter V and Tables 2 through 4. Additional data is presented in Appendix B. Of the 30 responses, 17 (57%) were custom feeding operations. The remaining thirteen responses consisted of eight (27%) corporate feedyards, and five (17%) unidentified. The twenty five specified surveys were used for all data analyses, and the remaining unidentified five surveys were removed. Of the twenty-five responses analyzed, 68% were customer feedyards and 32% were corporate level feedyards. Average feedyard capacity was 58,000 for the corporate yards and 30,000 for the customer feedyards. This was expected, given corporate feedyards tend to be larger in size compared to most customer level operations. Managers' responded with a median of 55-64 years of age for customer feedyards (28%) and 45-54 years for corporate feedyards (16%). When asked how many years the managers had spent in a management role, responses showed an average of 12 years for the customer feedyards and 6 years for the corporate feedyards (Table 1).

Table 1. Demographics of Managers and Feedyards

1. What is the structure of the feedyard you currently manage?

	Customer Feedyards	Corporate Feedyards
Frequency	17	8
%	(68.00)	(32.00)

2. What is the capacity of the feedyard you manage? (in 000s)

	Customer Feedyards	Corporate Feedyards
Mean	29.59	57.75
Std. Dev.	(17.26)	(21.15)

4. What is your age?

	24-34	35-44	45-54	55-64	65-74
Customer Feedyards	2	4	3	7	1
	(8.00)	(16.00)	(12.00)	(28.00)	(4.00)
Corporate Feedyards	1	1	4	2	0
	(4.00)	(4.00)	(16.00)	(8.00)	(0.00)

6. How many years have you managed your current feedyard?

	Customer Feedyards	Corporate Feedyards
Mean	12.06	6.14
Std. Dev.	(10.14)	(5.87)

top number=frequency, and bottom number=percentage distribution.

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Labor Survey

General Approach

A vital part of the feedyard business structure is the labor force. To meet study objectives, primary data from the feedyard labor supply was needed. In order to determine employee motivations, opinions, and perceptions a labor survey instrument soliciting employee feedback was developed and deployed in January of 2019. The questionnaire and all methods were approved prior to elicitation by the Institutional Review Board at West Texas A&M University (WTAMU IRB#02-11-18). The survey instrument and all recruitment materials are included in Appendix A.

This survey was sent via the United States Postal Service (USPS) to feedyard employees throughout the study area. The sample population was created from the TCFA member database. A total of 101 feedyards were selected to receive labor surveys to gain a better understanding of the labor population of the cattle feeding industry. Each feedyard received a package with instructions and labor survey packets. Birch and Brooks (2015) stated an average animal to employee ratio of 1,095 to 1. This ratio was utilized to determine the appropriate number of labor packets each feedyard should receive. Feedyard capacities were collected from the 2018 Beef Spotter (Spotter Publications, 2018) or direct elicitation via phone call to the feedyard. By using this ratio along with a sample population percentage of 22%, the surveys were dispersed across the sample population. The 22% sampling rate was determined based on the goal to disperse approximately 700 surveys to laborers throughout the industry. Therefore, by taking this percentage of total estimated employees from each feedyard, it allowed the study to disperse a total of 685 surveys randomly throughout the labor population. For example, a

medium sized feedyard with a 42,000 head capacity, would be expected to have approximately 38 employees. After using the 22% sample percentage, the feedyard would receive a package with 8 labor packets to be distributed randomly to employees across the feedyard. These packages were shipped to the target feedyards and were addressed to the attention of the manager. The package contained information and instructions for the manager. These instructions directed the manager to randomly choose an equal number of participants throughout all departments of the feedyard, and to disperse as evenly as possible (Appendix A).

Labor Survey Packet

Within the cattle feeding industry, the labor force is largely split between English and Spanish speaking individuals. All labor survey materials were developed in both English and Spanish (Appendix A). The labor survey consisted of thirty questions split across three sections: demographic information, employment satisfaction, and employment perception and opinion.

The objectives for this survey were as follows:

- Assess the demographics and backgrounds of current employees in the feedyard industry,
- Obtain better knowledge of the satisfaction employees possess towards their jobs, and
- Discover feelings and attitudes of employees towards certain areas of their occupations.

In order to keep the responses random and confidential each survey respondent received an unopened labor packet containing: an invitation instruction letter (English and Spanish), one English survey, one Spanish survey, a business reply envelope, and a pair of TCFA and West Texas A&M University (WT) logoed cotton gloves. All laborers were advised to fill out the survey voluntarily and return in the business reply envelope. Employees had the option to place it in the feedyard outgoing mail or place it in any USPS mail collection bin.

Distribution of the survey instruments occurred on February 19th, 2019. On February 22nd, each feedyard was called to verify delivery and provide assistance to feedyard managers with questions or concerns. The majority of feedyard managers had received the package, and had no trouble understanding the instructions given.

Data & Analysis

Of the 101 feedyards selected, 685 individual labor survey packets were mailed. Collection of responses ended approximately a month later in the middle of March 2019. Respondents returned 152 useable surveys for a response rate of 22.19%. A digital version of the survey was developed using Qualtrics Survey Software and was then utilized as a data inputting tool in order for the data to be entered with consistency. After all responses were entered, the responses were then exported to a spreadsheet for analysis. All data analysis was completed in Statistical Analysis Service (SAS 9.4 Institute). Summary statistics of survey responses are presented in Table B-1 through Table B-11 in Appendix B.

Survey responses were analyzed over three unique categories: feedyard size, ethnicity, and feedyard department. These categories were examined with chi-square analysis to determine if significant differences were present. These results are presented in Table 5 through Table 13 and fully discussed in Chapter V. Lastly, logistical regression analysis was performed on three questions specifically to determine factors related to job satisfaction, factors related to laborers' willingness to accept promotions, and factors related to laborers' recommending feedyard employment to their children.

Open ended questions were analyzed by determining commonly used phrases and words and then placed into a word cloud for evaluation of frequency and distribution. Word clouds can be utilized in a way to evaluate open ended responses by recognizing the frequencies of similarities. The response is then revealed in a visual image with different sizes for words or phrases based on the number of similar responses. Here a word cloud technique was used to organize the opinionated responses of two questions where employees were asked to report the most satisfying characteristics of their jobs and where they experienced the most unsatisfying aspects of their jobs. Once responses were evaluated, the word cloud recorded words in bigger text for the words with a higher frequencies, and words with smaller text for the words with lower frequencies. This graphic allowed for a better understanding of key points and observations made by the labor force. Visuals of the word clouds are provided in Appendix B.

CHAPTER V

RESULTS

Manager Survey

Responses to the management survey were divided into two groups based on the self-reported structure of the feedyard (corporate vs. customer). These two groups were the primary interest of the study as access to internal resources and daily tasks are different across the two business structures. Corporate feedyards are typically larger in size and operate by feeding their own cattle. Customer feedyards tend to be smaller in capacity and focus their operation on feeding customer cattle. Corporate level feedyards tend mainly to the overall supervision of personnel in the feedyard. These managers assist in facilitating the movement of cattle, the receiving of commodities, and the management of personnel. Customer level feedyard managers not only spend time doing the above, but also are responsible for minimizing risks through hedging cattle, buying and trading grain, procurement and marketing cattle, and in charge of managing the personnel at the facility. Neither feedyard manager is prominent above the other, or inferior of the two. Their roles are merely separated. Additional assistance and responsibilities of the corporate feedyards are spread out amongst both the managers and the corporate offices. In the traditional customer feedyards, managers also focus on customer relationships.

The primary objective of the management survey was to gain a better understanding of the difficulties managers in the industry face on a day-to-day basis. Frequency evaluation of descriptive statistics were derived and summarized in three main parts: hiring and retention, time management challenges, and daily allocation of engaging and educating employees. These results were analyzed and reported based on their frequencies and distributions between the two feedyard structures, along with chi-square analysis (Table 2).

Table 2. Hiring & Retention Difficulties Reported by Department and Type, Percentage Distribution

74. Do you currently have difficulty hiring employees with the training needed for your feedyard?

	Lots of Difficulty	Neutral	Little Difficulty	N/A	*P*-value
General Admin.					
Customer Feedyards	46.67	13.33	40.00	0.00	
Corporate Feedyards	25.00	25.00	50.00	0.00	0.5615
Mill Dept.					
Customer Feedyards	56.25	25.00	12.50	6.25	
Corporate Feedyards	87.50	0.00	12.50	0.00	0.3503
Feed Dept.					
Customer Feedyards	52.94	29.41	17.65	0.00	
Corporate Feedyards	50.00	37.50	12.50	0.00	0.9002
Cattle Dept.					
Customer Feedyards	82.35	11.76	5.88	0.00	
Corporate Feedyards	75.00	12.50	12.50	0.00	0.8449
Yard Dept.					
Customer Feedyards	50.00	18.75	31.25	5.88	
Corporate Feedyards	50.00	37.50	12.50	0.00	0.4724

number=frequency percentage distribution.

*Comparisons differed $P < 0.10$.

**Comparisons differed $P < 0.05$.

***Comparisons differed $P < 0.01$.

Table 2. Continued

75. Do you currently have difficulty retaining employees in your feedyard?					
	Lots of Difficulty	Neutral	Little Difficulty	N/A	*P*-value
General Admin.					
Customer Feedyards	0.00	25.00	75.00	0.00	
Corporate Feedyards	0.00	25.00	75.00	0.00	1.0000
Mill Dept.					
Customer Feedyards	20.00	33.33	40.00	6.67	
Corporate Feedyards	37.50	25.00	37.50	0.00	0.7355
Feed Dept.					
Customer Feedyards	43.75	18.75	37.50	0.00	
Corporate Feedyards	25.00	25.00	50.00	0.00	0.6703
Cattle Dept.					
Customer Feedyards	76.47	11.76	11.76	0.00	
Corporate Feedyards	37.50	25.00	37.50	0.00	0.1582
Yard Dept.					
Customer Feedyards	50.00	25.00	25.00	0.00	
Corporate Feedyards	37.50	12.50	50.00	0.00	0.4534

number=frequency percentage distribution.
*Comparisons differed at $P < 0.10$.
**Comparisons differed at $P < 0.05$.
***Comparisons differed at $P < 0.01$.

Hiring and Retention

Results generally confirmed that one of the most challenging feedyard departments is the cattle department. This expectation was established over the course of all four feedyard manager interviews prior to the survey development. The cattle department is comprised in most cases of shipping and receiving, doctoring, and pen riding. Pen riding is generally the biggest responsibility of the cattle department. Identifying sick, diseased, and dead cattle is a daily task for these employees. While not always, in most yards pen riders are mounted on horseback and ride through the pens searching for potential cattle which fall into the above categories. Pen riders carry the reputation of being nomadic and are known for a lack of loyalty to their employer. Within our data, 80% of feedyard managers claimed to have the greatest hiring difficulty in the

cattle department (Table 2). A clear understanding of why managers experience difficulty in the cattle department is still unknown. Perhaps a lack of work ethic, salary, labor competition, or competency is the driving force behind the issue. Furthermore, not only is hiring a problem, but also retention. While this challenge exists in both feedyard structures, it is more evident in customer feedyards, where these managers tend to have more difficulty in retaining their cattle department employees (76%) (Table 2). The employees within this department face the elements daily, working in extreme conditions with little to no shelter from them.

When asked about retention, 82% of customer yard managers ranked hiring with 'Lots of Difficulty' along with a 76% response rate of the cattle department having 'Lots of Difficulty' in retention of these employees (Table 2). Customer feedyard managers generally have more difficulty with managing these employees than the corporate feedyard managers. Similarly, corporate feedyard managers have a high response rate of 75% stating there is 'Lots of Difficulty' in hiring these employees. However, unlike customer managers, 38% responded with 'Lots of Difficulty' when it comes to the retention of cattle department labor. This aligns with thoughts generated from initial interviews, along with industry knowledge of decreasing labor supply, difficulty in hiring cattle department employees is noted. When evaluating retention, there tends to be a difference among yard types. As higher levels of difficulty tend to be reported among customer managers compared to corporate managers ($P = 0.15$).

Responses from the mill department, show that managers are more 'Neutral' (33%) or tend to have 'Little Difficulty' (40%) when it comes to retention. This can be expected, as employees are generally protected from the elements. These employees

focus on receiving the raw commodities, mixing rations, and maintaining the functionality of the mill's operating machinery. As a whole, managers recorded a 26% response rate of having 'Lots of Difficulty' with retention of mill employees (Table 2). In initial interviews, managers had less to say in regard to the mill. One potential explanations is that there appears to be fewer issues and problems when looking at labor management in this department. Assumptions of the mill being a less variable department was confirmed by the managers who participated in the survey. Customer feedyard managers reported a low 20% response of having 'Lots of Difficulty' dealing with retention in the mill; on the other hand, corporate cattle feeders reported more with 38%. In terms of hiring corporate mill employees, managers have shown an alternative stance where it seems that all managers have a harder time hiring than retaining. Corporate feedyards have responded with 88% of managers facing 'Lots of Difficulty' when hiring to fill vacancies in the mill and customer managers reported 56% (Table 2).

In the general administration department, where employees are faced with little exposure to elements, miniscule amounts of physical labor, and easily attainable skills, survey results show similar responses of minimal challenges in both recruitment and retention. There was very little hiring difficulty, which additionally, is the least difficult across both customer and corporate feedyards with 75% ranking of 'Little Difficulty' in retaining employees. This finding is consistent with the initial feedback gathered in the personal interviews with feedyard managers at the onset of the project (Table 2).

Pertaining to the yard department, in Table 2, there was a small variation between responses among customer and corporate feedyard types when asked about the difficulty of hiring and retaining employees. Generally, responses from managers across both

structures are very similar. Both customer feedyard managers and corporate feedyard managers responded with 50% to have 'Lots of Difficulty'. Findings show the yard department to be the second lowest level of responses dealing with 'Lots of Difficulty' amongst the five different departments pertaining to the difficulty of hiring employees. Responses concerning retention in yard department employees have shown that customer and corporate type yards both struggle fairly equally with 50% and 38% ranked 'Lots of Difficulty', respectively.

Results indicated an agreement in expected responses pertaining to the feed department. In this department, roles and responsibilities have little variation between the two structures. Employees read bunks to initially begin the day. They service feed trucks and deliver feed to all cattle in the feedyard. In the feed department, 50% of corporate managers said they have 'Lots of Difficulty' hiring employees, and 53% of customer feedyards responded similarly. On the contrary, only two responses, both one customer and one corporate, feedyard ranked hiring as 'Little Difficulty' in the feed department (Table 2). Retention difficulty in the corporate feedyards was lower when compared to the customer feedyards. It was observed that 50% of the managers at corporate feedyards ranked retention in the feed department as 'Little Dfficulty', and 44% of the customer feedyard managers ranked this department as 'Lots of Difficulty' (Table 2).

Time and Management Challenges

According to the different roles and responsibilities of corporate and customer feedyard managers, stress and time variables were evaluated as a means to better understand where managers face challenges. Managers from both yard types were asked

to rank the amount of stress and time associated with each department on a Likert scale from 1-5, where responses 1 & 2 indicated more stress, 3 was a neutral amount of stress, and 4 & 5 were less stress. Results were then split and evaluated by yard type.

Managers reported the majority of their time is spent in the cattle department, where 71% and 75% of customer and corporate managers ranked this department to be where they spend most of their time, respectively. Both customer and corporate feedyards tend to also have more stress associated with the cattle department at 63% and 88%, respectively (Table 3). Managers are focused on the production of healthy and wholesome cattle, regardless of the feedyard business structure. Corporate managers' responsibility is largely focused on company owned cattle care, whereas customer managers are providing care for customer owned cattle. In both cases, cattle are the primary factor leading to company profits.

Table 3. Time & Stress, percentage frequency

34. Rank from highest (1) to lowest (5), which department takes the greatest amount of your time and attention?

	More Time	Neutral	Less Time	N/A	*P*-value
General Admin.					
Customer Feedyards	11.76	11.76	76.74	0.00	
Corporate Feedyards	37.50	0.00	62.50	0.00	0.2357
Mill Dept.					
Customer Feedyards	29.41	23.53	47.06	0.00	
Corporate Feedyards	62.50	12.50	25.00	0.00	0.2892
Feed Dept.**					
Customer Feedyards	64.71	23.53	11.76	0.00	
Corporate Feedyards	12.50	25.00	62.50	0.00	0.0175
Cattle Dept.					
Customer Feedyards	70.59	23.53	5.88	0.00	
Corporate Feedyards	75.00	25.00	0.00	0.00	0.7826
Yard Dept.					
Customer Feedyards	23.53	17.65	58.82	0.00	
Corporate Feedyards	12.50	37.50	50.00	0.00	0.5221
	11.76	11.76	76.74	0.00	

36. Rank from highest (1) to lowest (5), which department is the most stressful to manage?

	More Stress	Neutral	Less Stress	N/A	*P*-value
General Admin.					
Customer Feedyards	25.00	12.50	62.50	0.00	
Corporate Feedyards	12.50	0.00	87.50	0.00	0.3925
Mill Dept.					
Customer Feedyards	50.00	18.75	31.25	0.00	
Corporate Feedyards	50.00	50.00	0.00	0.00	0.1173
Feed Dept.					
Customer Feedyards	50.00	25.00	25.00	0.00	
Corporate Feedyards	37.50	12.50	50.00	0.00	0.4534
Cattle Dept.					
Customer Feedyards	62.50	18.75	18.75	0.00	
Corporate Feedyards	87.50	0.00	12.50	0.00	0.3507
Yard Dept.					
Customer Feedyards	12.50	25.00	62.50	0.00	
Corporate Feedyards	12.50	37.50	50.00	0.00	0.8071

number=frequency percentage distribution.

*Comparisons differed at $P < 0.10$.

**Comparisons differed at $P < 0.05$.

***Comparisons differed at $P < 0.01$.

As for the other four feedyard departments, the results yielded interesting points. Second to the cattle department, managers tend to face the second most stress in the mill and feed departments for both yard types. Customer feedyard managers spend more time in the feed department (65%), while corporate yard mangers are more likely to allocate their time elsewhere and only 13% spend more time in the feed department ($P = 0.02$). This suggests potential differences in priorities pertaining to the customer feedyards and corporate feedyards. Additionally, differences also tend to exist when analyzing stress associated with the mill department ($P = 0.12$). Customer and corporate managers seem to have opposite positions. Of the corporate managers, 50% stated they have more stress with the mill department and 50% reported they a neutral amount of stress in this department. When the mill department is compared to the customer managers only 19% stated they have a neutral amount of stress with this department; however, 31% reported less stress in the mill (Table 3).

Following the manager's responses towards the mill and the feed departments were the general administration and the yard department. These two departments were ranked least often of being the most stressful to manage throughout the feedyard. Customer feedyard managers seemed to find more stress in managing general administration tasks compared to the corporate managers; where 25% of customer managers ranked 'Most Stressful', and only 13% of corporate managers responded alike. This could be due to the fact that customer managers attend to not just company cattle, but also to other customers and their cattle. However, corporate managers seem to spend more time in the general administration department than customer mangers. Thirty-eight percent of corporate managers stated they spend more time in the general administration

department compared to only 12% from the customer managers. Differences in daily job roles could have an impact on these results. Lastly, the yard department was largely unified across feedyard types. Customer and corporate managers responded with 13% identified their 'Most Stressful' department as the yard department (Table 3). Each department showed up as a respondent's most stressful and also another's less stressful department to manage. This exhibits the differences across the industry and shows that no two feedyards are alike when it comes to challenges pertaining to stress and time.

Daily Engagement and Education of Employees

Unaware of the manager's daily allocation of time, this study purposely sought to obtain a better understanding of how managers spend their time. In the survey, two questions were directed towards the average day, and the number of hours spent in direct contact or engagement with employees. In addition, managers were asked to elaborate how much of their time engaging employees was spent educating them.

Table 4. Hours Engaging and Educating Employees.

14. On the average day, how many hours do you spend in direct contact with your employees?		
	Mean	Std. Dev.
Customer Feedyards	5.18	(2.70)
Corporate Feedyards	3.86	(1.73)
15. On the average day, how many hours do you spend in educating your employees?		
	Mean	Std. Dev.
Customer Feedyards	2.18	(1.94)
Corporate Feedyards	1.63	(0.74)

Results shown in Table 4 indicate that the customer feedyard managers were spending more time with their employees than corporate managers. The mean amount of hours customer managers spend on employee engagement was centered at 5.18 hours a day; whereas, the mean amount of hours for a corporate feedyard manager was at 3.86 hours a day. The mean amount of time customer feedyard managers spent educating laborers was 2.18 hours a day, as compared to corporate feedyard managers where results show that they spent 1.63 hours a day educating their laborers. It can be concluded that the amount of hours associated with educating employees for feedyard managers seem to be approximately 40% of their total time engaging with employees. The consistency across the time spent engaging and educating employees by both types of feedyard managers displays a common practice that is likely to be natural throughout the industry.

Labor Survey

Chi-square tests of frequency distributions were conducted to determine differences between three divided samples of the survey responses. Some numbered questions had multiple parts and some questions had varying response categories. Some had two response categories (e.g., yes or no), where others asked for responses on a scale. Statistically significant differences were found between several of the groups. The three divisions of the data are as follows:

In the first section, data is sorted by feedyard size based on capacity, where there are three separate groups which represent small (Group 1), medium (Group 2), and large (Group3) sized feedyards. In this analysis, small feedyards (Group 1) were yards where cattle capacities were less than or equal to 28,000 head on feed. Medium sized feedyards (Group 2) were selected based on the feedyard capacity of 28,001 – 59,999 head. Lastly, large feedyards (Group3) were those that had a capacity of 60,000 head or greater.

In the second set of chi-square tests, the survey responses were broken up to analyze differences across feedyard departments. As mentioned above, each feedyard typically operates with five departments (Wagner, Achibeque, and Feuz, 2014). Therefore, the analysis is focused on determining differences across the five different departments (cattle, feed, mill, yard, and general administration).

Lastly, chi-square testing was conducted throughout the survey respondents based on ethnicity. Ethnicity was evaluated in two groups. The first group refers to the responses that answered the survey as Caucasian, and the second group refers to the responses that answered the survey as Hispanic, African American, or Native

American/Indian. Only one response of each African American and Native American occurred in the study. Therefore, due to lack of sample size, both responses were included with the Hispanic/Other group.

In each division of the data selected, the chi-square analysis was conducted based on three different sections of the laborer survey (Appendix A). In the survey, laborers were asked questions based on their demographics, satisfaction, and work life opinions. Therefore, in respect to these separations, the data is represented and in accordance with the layout of the survey questionnaire.

Labor Responses by Feedyard Size

Demographics

Responses in Table Five are based on feedyard size and were analyzed by their demographics in order to better understand what the demographics are based on different sizes throughout the industry.

Education: When laborers were asked to record their highest level of completed education, results detected a difference among the feedyard groups. Of the respondents, 31% of Group 1 feedyard laborers had taken at least some college courses or received a two-year degree. This differed from Group 2 and Group 3, where respondents recorded 15% and 44%, respectively. Not completing high school, high school graduates, and college graduates were also recorded; however, there was no difference between the feedyard size and those categories of education.

Yard Department: Responses across the survey population noted a difference among the amount of responses received from the yard department employees. Therefore, the data results show that there were less surveys received from yard department employees between Group 1, Group 2, and Group 3. Results show 22% of survey responses from large feedyards were derived from the yard department. This is different compared to the small feedyards that yielded only 10%, and medium sized feedyards with 6%. As for the other departments, there was no significant difference in the number of respondents between the three different feedyard sizes (Table 5).

Table 5. Frequencies by Feedyard Size (Demographics)

	Group 1	Group 2	Group 3	
Total Frequency per Group	49	51	51	
				P-value
Q2a. What is your gender?				0.9941
Male	80.85	81.25	80.39	
Female	19.15	18.75	19.61	
Q3. What is your primary ethnicity?				
White/Caucasian	44.90	52.94	50.00	0.7189
Hispanic or Latino (everything else)	55.10	47.06	50.00	0.6126
Q4. What is the highest level of education you have completed?				
1 = Did not complete high school	22.92	18.00	14.58	0.5718
2 = High school graduate	27.08	36.00	29.17	0.6050
3 = Some college & Two year degree**	31.25	20.00	43.75	0.0407
4 = Four year degree or beyond	18.75	26.00	12.50	0.2360
Q7. What department do you currently work in?				
Cattle Dept.	36.96	37.25	21.57	0.1551
Feed Dept.	19.57	19.61	23.53	0.8548
Mill Dept.	10.87	9.80	13.73	0.8144
Yard Dept.*	10.87	5.88	21.57	0.0540
General Admin./Office Staff	21.74	27.45	19.61	0.6238
Q9. Do you plan to work at your current feedyard until retirement?				0.4176
Yes	53.06	42.00	43.75	
No	4.08	14.00	14.58	
Maybe	42.86	44.00	41.67	

number=frequency percentage distribution.

Group Number - 1=<28,000 head, 2=28,001-59,999 head, 3=>60,000 head.

*Comparisons differed at $P < 0.10$.

**Comparisons differed at $P < 0.05$.

***Comparisons differed at $P < 0.01$.

Satisfaction

When feedyard laborers were asked about their satisfaction, generally all employees expectations for their job had been met, and majority of employees throughout the feedyard sizes were satisfied with their jobs, coworkers, and the amount of training they had received. There were no differences between the three feedyard group sizes based on satisfaction (Table 6).

Table 6. Frequencies by Feedyard Size (Satisfaction)

	Group 1	Group 2	Group 3	
Total Frequency per Group	49	51	51	
				P-value
Q14. Do you feel as if your expectations for your job have been thoroughly met?				0.4627
Yes	80.85	65.31	72.00	
No	6.38	16.33	10.00	
Maybe	12.77	18.37	18.00	
Q15. How satisfied are you with your current position?				0.1758
7 = Extremely Satisfied	54.17	36.00	35.29	
6 = Moderately Satisfied	37.50	44.00	37.25	
5 = Somewhat Satisfied	6.25	2.00	11.76	
4 = Neutral	0.00	14.00	11.76	
3 = Somewhat Dissatisfied	2.08	2.00	1.96	
2 = Moderately Dissatisfied	0.00	2.00	1.96	
1 =Extremely Dissatisfied	0.00	0.00	0.00	
Q16. How satisfied are you with your coworkers?				0.7895
7 = Extremely Satisfied	45.83	28.00	39.22	
6 = Moderately Satisfied	37.50	46.00	37.25	
5 = Somewhat Satisfied	8.33	10.00	11.76	
4 = Neutral	4.17	10.00	5.88	
3 = Somewhat Dissatisfied	2.08	6.00	3.92	
2 = Moderately Dissatisfied	0.00	0.00	0.00	
1 =Extremely Dissatisfied	2.08	0.00	1.96	

number=frequency percentage distribution.
Group Number - 1=<28,000 head, 2=28,001-59,999 head, 3=>60,000 head.
*Comparisons differed at $P < 0.10$.
**Comparisons differed at $P < 0.05$.
***Comparisons differed at $P < 0.01$.

Table 6. Continued

Q17. How satisfied are you with the investment that your company makes in your training and education?				0.3544
7 = Extremely Satisfied	43.75	21.57	31.37	
6 = Moderately Satisfied	39.58	33.33	27.45	
5 = Somewhat Satisfied	6.25	15.69	13.73	
4 = Neutral	6.25	19.61	17.65	
3 = Somewhat Dissatisfied	0.00	3.92	3.92	
2 = Moderately Dissatisfied	2.08	3.92	1.96	
1 =Extremely Dissatisfied	2.08	1.96	3.92	

number=frequency percentage distribution.
Group Number - 1=<28,000 head, 2=28,001-59,999 head, 3=>60,000 head.
*Comparisons differed at $P < 0.10$.
**Comparisons differed at $P < 0.05$.
***Comparisons differed at $P < 0.01$.

Work Life

Feelings on Advancement: When laborers were asked if they felt like there was room for advancement opportunities at their respective feedyard, majority of employees in Group 1 and Group 3 believe there are greater opportunities (53% and 68%). On the contrary, 42% of Group 2 respondents state that they do not feel like there is any room for advancement at their feedyard. This is in comparison to the 21% of employees in Group 1 and 18% of employees in Group 3 that responded that they do not feel like there is room for advancement. Therefore, there seems to be a difference in the number of employees between feedyard size that feel like there is no room for advancement and those that feel like they are unsure if there is any room for advancement (Table 7). Laborers were also asked if they would be willing to take a promotion, and if they would encourage their children to work in the industry. Neither of these questions had a significant difference between the different feedyard groups. However, about quarter of the respondents stated that they would not be willing to take a promotion and roughly

half responded that they were unsure or would not encourage their children to enter the feedyard industry (Table 7).

Table 7. Frequencies by Feedyard Size (Perceptions)

	Group 1	Group 2	Group 3	
Total Frequency per Group	49	51	51	
				P-value
Q23. Do you feel like there is room for advancement in your employment?**				0.0219
Yes	53.19	46.00	68.00	
No	21.28	42.00	18.00	
Unsure	25.53	12.00	14.00	
Q24. Would you be willing to take a promotion?				0.5028
Yes	76.09	70.59	70.59	
No	6.52	13.73	5.88	
Unsure	17.39	15.69	23.53	
Q25. Would you encourage your children to work in the feedyard industry?				0.7901
Yes	53.19	41.18	48.00	
No	25.53	35.29	28.00	
Unsure	21.28	23.53	24.00	

number=frequency percentage distribution.

Group Number - 1=<28,000 head, 2=28,001-59,999 head, 3=>60,000 head.

*Comparisons differed at $P < 0.10$.

**Comparisons differed at $P < 0.05$.

***Comparisons differed at $P < 0.01$.

Labor Responses by Department

Demographics

Gender: After an analysis of the demographics in the industry divided by the different departments, a difference was detected in the amount male and female respondents by each department. Even though majority of the laborers in the industry

were men, there was a significant difference in the number of males and females. Most, if not all responses from each feedyard was found in male laborers with percentages such as: 87% in the cattle department, 92% in the feed department and 100% in the mill and yard departments. However, this shifted when evaluating the general administration (office) department. In general administration, the majority of laborers in this department were female (58%). This was assumed prior to the analysis, due to general knowledge of the industry (Table 8).

Ethnicity: When evaluating the responses from different ethnicities, the results detected a difference among the number of Caucasian and Hispanic/Other employees between the five different departments. Based on our results, Caucasian employees were generally represented in the cattle department (61%) and the general administration department (79%), whereas Hispanic/Other employees were more represented in the feed, mill, and yard departments with 77%, 70%, and 68%, respectively.

Education: After dividing the responses by department, and asking the employees to state the highest level of education completed, the chi-square analysis discovered differences between the departments according the number of respondents without a high school degree, some college or a two-year degree, and employees with a four year degree or professional degree (MS, MBA, CPA, etc.) Table 8 shows that employees in the general administration department recorded no responses with anything less than a high school degree (0%). Percentages of respondents with less than a high school degree was consistent throughout the feed, mill, and yard departments (26%, 29%, and 27%, respectively); however, the cattle department employees seemed to have more education with only 18% having less than a high school degree. All departments had no difference

when it came to number of laborers with a high school degree. As for laborers with some college education and potentially a two-year degree, the cattle, yard and office departments had the most representation in this category with 36%, 39%, and 44%, respectively. On the other hand, only one respondent from the mill department fell into this category (6%), and a low 20% was represented by the laborers in the feed department (Table 8).

When the laborers were asked if they had intentions to retire from the current feedyard they worked at, employees responded consistently throughout. Therefore, there was no difference recorded across the different feedyard departments.

Table 8. Frequencies by Department (Demographics)

	Cattle	Feed	Mill	Yard	Office	
Total Frequency per Group	47	32	17	19	34	
						P-value
Q2a. What is your gender?* **						<.0001
Male	87.23	92.86	100.00	100.00	41.18	
Female	12.77	7.14	0.00	0.00	58.82	
Q3. What is your primary ethnicity?						
White/Caucasian***	61.70	22.58	29.41	31.58	79.41	<.0001
Hispanic or Latino (everything else)***	38.30	77.42	70.59	68.42	20.59	<.0001
Q4. What is the highest level of education you have completed?						
1 = Did not complete high school**	17.78	26.67	29.41	27.78	0.00	0.0203
2 = High school graduate	31.11	36.67	52.94	27.78	17.65	0.1268
3 = Some college & Two year degree**	35.56	20.00	5.88	38.89	44.12	0.0348
4 = Four year degree or beyond**	15.56	16.67	11.76	5.56	38.24	0.0254
Q9. Do you plan to work at your current feedyard until retirement?						
Yes	42.55	43.33	56.25	36.84	57.58	
No	12.77	10.00	6.25	21.05	6.06	
Maybe	44.68	46.67	37.50	42.11	36.36	

number=frequency percentage distribution.

*Comparisons differed at $P < 0.10$.

**Comparisons differed at $P < 0.05$.

***Comparisons differed at $P < 0.01$.

Satisfaction

Job Expectations: As for employees and their expectations between the different feedyard departments, results show that there is a difference amongst responses by department type. Laborers were asked if their expectation of the job had been thoroughly met (Table 9). Results detect that 91% of office employees' job expectations had been met. Secondly, 77% of the cattle department employees also agreed that their expectations had been met. As for the other departments such as feed (58%), mill (68%), and yard (63%), less laborers agreed by responding, 'yes', their expectations of their respective jobs had been met. After laborers were asked about their satisfaction in their position, with their coworkers, and with the company's investment in training and education, we did not detect any differences throughout this section of the survey (Table 9).

Table 9. Frequencies by Department (Satisfaction)

	Cattle	Feed	Mill	Yard	Office	
Total Frequency per Group	47	32	17	19	34	
						P-value
Q14. Do you feel as if your expectations for your job have been thoroughly met?*						0.0892
Yes	77.78	58.06	68.75	63.16	90.91	
No	6.67	22.58	6.25	15.79	6.06	
Maybe	15.56	19.35	25.00	21.05	3.03	
Q15. How satisfied are you with your current position?						
7 = Extremely Satisfied	36.96	43.75	37.50	36.84	50.00	
6 = Moderately Satisfied	45.65	34.38	25.00	47.37	38.24	
5 = Somewhat Satisfied	2.17	6.25	25.00	15.79	0.00	
4 = Neutral	10.87	9.38	12.50	0.00	8.82	
3 = Somewhat Dissatisfied	2.17	3.13	0.00	0.00	2.94	
2 = Moderately Dissatisfied	2.17	3.13	0.00	0.00	0.00	
1 =Extremely Dissatisfied	0.00	0.00	0.00	0.00	0.00	
Q16. How satisfied are you with your coworkers?						
7 = Extremely Satisfied	28.26	34.38	35.29	47.37	51.52	
6 = Moderately Satisfied	50.00	37.50	29.41	47.37	30.30	
5 = Somewhat Satisfied	8.70	6.25	11.76	0.00	18.18	
4 = Neutral	8.70	9.38	17.65	0.00	0.00	
3 = Somewhat Dissatisfied	4.35	9.38	5.88	0.00	0.00	
2 = Moderately Dissatisfied	0.00	0.00	0.00	0.00	0.00	
1 =Extremely Dissatisfied	0.00	3.13	0.00	5.26	0.00	
Q17. How satisfied are you with the investment that your company makes in your training and education?						0.9343
7 = Extremely Satisfied	32.61	34.38	29.41	31.58	32.35	
6 = Moderately Satisfied	30.43	25.00	23.53	52.63	35.29	
5 = Somewhat Satisfied	13.04	12.50	17.65	5.26	11.76	
4 = Neutral	15.22	21.88	23.53	5.26	8.82	
3 = Somewhat Dissatisfied	2.17	0.00	5.88	5.26	2.94	
2 = Moderately Dissatisfied	2.17	3.13	0.00	0.00	5.88	
1 =Extremely Dissatisfied	4.35	3.13	0.00	0.00	2.94	

number=frequency percentage distribution.
*Comparisons differed at $P < 0.10$.
**Comparisons differed at $P < 0.05$.
***Comparisons differed at $P < 0.01$.

Work Life

Willingness to Accept Promotion: When feedyard employees were asked if they would be interested in accepting a promotion (Table 10), we noted the majority (74%) of employees would take one if offered. However, the cattle department and the office department had 80% and 88% of employees say that they would accept a promotion, but only 47% of mill employees would be willing to take the additional responsibility. As for the feed department and the yard department employees, their respective percentage of laborers willing to take a promotion was a little higher than the mill at 72% and 63%, respectively (Table 10).

Encourage Children to Enter the Industry: Lastly, in Table 10, there was a difference noticed among the feedyard departments when laborers were asked if they would encourage their children to follow their footsteps and go into the cattle feeding industry. Here we observed a variety of different responses throughout the laborers, where office department employees and feed department employees were more willing at 55% and 65%, would say 'yes' to encouraging their children to pursue a career in the feedyard industry. As for the other departments, the cattle department had the highest number of 'no' responses at 36%, followed by the feed department (35%), yard department (32%), and lastly the mill and general administration at 18% each.

Table 10. Frequencies by Department (Perceptions)

	Cattle	Feed	Mill	Yard	Office	
Total Frequency per Group	47	32	17	19	34	
						P-value
Q23. Do you feel like there is room for advancement in your employment?						0.4757
Yes	52.27	59.38	58.82	61.11	52.94	
No	20.45	34.38	23.53	27.78	32.35	
Unsure	27.27	6.25	17.65	11.11	14.71	
Q24. Would you be willing to take a promotion?**						
Yes	80.00	71.88	47.06	63.16	88.24	
No	2.22	18.75	17.65	15.79	0.00	
Unsure	17.78	9.38	35.29	21.05	11.76	
Q25. Would you encourage your children to work in the feedyard industry?**						
Yes	42.22	54.84	41.18	26.32	64.71	
No	35.56	35.48	17.65	31.58	17.65	
Unsure	22.22	9.68	41.18	42.11	17.65	

number=frequency percentage distribution.
*Comparisons differed at $P < 0.10$.
**Comparisons differed at $P < 0.05$.
***Comparisons differed at $P < 0.01$.

Labor Responses by Ethnicity (Caucasian and Hispanic/Other)

Demographics

Gender: Once labor responses were divided across the data set by ethnicity, we noted a difference among the number of male and female employees (Table 11). Seventy percent of Caucasian laborers in the study were male, whereas 92% of our Hispanic/Other respondents were male. The remaining responses yielded 30% of Caucasian employees being female, and 8% of Hispanic/Other employees being female.

Education: Once evaluating the responses by education across the different ethnicities in the feedyard industry, results showed there was a difference among three of the four different categories we observed. Only 3% of Caucasian employees did not

finish high school compared to the 36% of Hispanic/Other respondents (Table 11). Similarly, responses indicated no difference between ethnicities in the amount of laborers where their highest level of education was completing high school. The difference continues on throughout the number of laborers with some college experience or a two-year degree, where 42% of Caucasian employees fell into this category, and only 21% of Hispanic/Other employees met this requirement. As for laborers in the study with at least a four year degree or another form of higher education by obtaining a professional degree (MS, MBA, etc.), results indicate that more Caucasians reside in this category than Hispanic/Other, 30% to 8%, respectively.

Feedyard Department: Significant differences exist across departments when examining ethnicity. In the cattle department and the office department, there were more Caucasian employees than Hispanic/Other employees, where 39% and 36% were Caucasian, and the remainder Hispanic/Other.

When asked if employees were planning on retiring at their current feedyard, responses were similar and no significant differences were detected between the two different ethnicities.

Table 11. Frequencies by Ethnicity (Demographics)

	Caucasian	Hispanic/Other	*P*-value
Q2a. What is your gender?* **			0.0010
Male	70.27	91.67	
Female	29.73	8.33	
Q4. What is the highest level of education you have completed?			
1 = Did not complete high school***	2.74	35.62	<.0001
2 = High school graduate	24.66	35.62	0.1490
3 = Some college & Two year degree***	42.47	20.55	0.0044
4 = Four year degree or beyond***	30.14	8.22	0.0008
Q7. What department do you currently work in?			
Cattle Dept.*	39.19	24.32	0.0521
Feed Dept.***	9.46	32.43	0.0006
Mill Dept.*	6.76	16.22	0.0711
Yard Dept.*	8.11	17.57	0.0854
General Admin./Office Staff***	36.49	9.46	<.0001
Q9. Do you plan to work at your current feedyard until retirement?			0.8263
Yes	49.32	44.59	
No	10.96	10.81	
Maybe	39.73	44.59	

number=frequency percentage distribution.
*Comparisons differed at $P < 0.10$.
**Comparisons differed at $P < 0.05$.
***Comparisons differed at $P < 0.01$.

Satisfaction

Job Satisfaction: When employees were asked to rank their satisfaction towards their position, a difference was detected between the two different ethnicities (Table 12) Respondents in both categories seemed to be generally satisfied overall; however, on the likert scale, 36% of Caucasians were extremely satisfied compared to 47% of

Hispanic/Other. On the next ranking, 'moderately satisfied', results showed that majority of Caucasian employees were moderately satisfied with their position, whereas a lower 28% of Hispanic/Other fell into this category. Following the two highest rankings of satisfaction, an equal 7% of both Caucasians and Hispanic/Other were 'somewhat satisfied', but more Hispanic/Other ranked being 'neutral' at 14% rather than the low 3% of Caucasians (Table 12).

Coworker Satisfaction: When laborers were asked with their respective satisfaction toward coworkers, results indicated that more Hispanic/Other employees were 'extremely satisfied' (43%) compared to the Caucasian employees (32%). Results flipped when examining the number of respondents who indicated they were moderately satisfied. Fifty-two percent of Caucasian employees said they were 'moderately satisfied'. While only 29% of Hispanic/Other indicated 'moderately satisfied'. As the scale decreased, there were more Caucasian employees that ranked 'somewhat satisfied' over Hispanic/Other, 11% and 9%, respectively (Table 12). However, in the next two categories, Hispanic/Other employees reported less satisfaction with their coworkers than their Caucasian counterparts. Responses in the 'neutral' ranking and the 'somewhat dissatisfied' ranking detected that there were 9% and 8% Hispanic/Other employees compared to 4% and 0% of Caucasian employees, respectively.

Employees were also asked to rank their satisfaction with the amount of training and education offered to them by their employers. Throughout these responses, there were no significant differences between ethnicities.

Table 12. Frequencies by Ethnicity (Satisfaction)

	Caucasian	Hispanic/Other	*P*-value
Q14. Do you feel as if your expectations for your job have been thoroughly met?			0.1743
Yes	79.17	66.22	
No	9.72	12.16	
Maybe	11.11	21.62	
Q15. How satisfied are you with your current position?**			0.0232
7 = Extremely Satisfied	35.62	47.37	
6 = Moderately Satisfied	52.05	27.63	
5 = Somewhat Satisfied	6.85	6.58	
4 = Neutral	2.74	14.47	
3 = Somewhat Dissatisfied	1.37	2.63	
2 = Moderately Dissatisfied	1.37	1.32	
1 =Extremely Dissatisfied	0.00	0.00	
Q16. How satisfied are you with your coworkers?**			0.0179
7 = Extremely Satisfied	31.51	43.42	
6 = Moderately Satisfied	52.05	28.95	
5 = Somewhat Satisfied	10.96	9.21	
4 = Neutral	4.11	9.21	
3 = Somewhat Dissatisfied	0.00	7.89	
2 = Moderately Dissatisfied	0.00	0.00	
1 =Extremely Dissatisfied	1.37	1.32	
Q17. How satisfied are you with the investment that your company makes in your training and education?			0.3214
7 = Extremely Satisfied	28.38	35.53	
6 = Moderately Satisfied	36.49	30.26	
5 = Somewhat Satisfied	10.81	13.16	
4 = Neutral	12.16	17.11	
3 = Somewhat Dissatisfied	5.41	0.00	
2 = Moderately Dissatisfied	4.05	1.32	
1 =Extremely Dissatisfied	2.70	2.63	

number=frequency percentage distribution.

*Comparisons differed at $P < 0.10$.

**Comparisons differed at $P < 0.05$.

***Comparisons differed at $P < 0.01$.

Work Life

Feelings on Advancement: Feedyard employees were asked if they felt like there was room for advancement (Table 13). A difference was detected in responses when evaluated between the two ethnicities. Most of both Hispanic/Other and Caucasians feel like, as though, there is room for advancement; however, more Caucasian laborers felt as though no advancement (33%) or they were unsure of advancement (10%). As for Hispanic/Other employees, 22% said there is no room for advancement and 26% were unsure.

Willingness to accept a Promotion: Of the employees surveyed, results indicated a difference in the number of laborers who would be willing to take a promotion. Seventy-nine percent of Caucasians said they would be willing to take a promotion, with only 10% saying 'no', and 11% responding 'unsure'. Hispanic/Other laborers responded with 66% as willing to take a promotion, and only 8% saying they would not. Interestingly, the number of respondents who claimed they were 'unsure' about taking a promotion was higher among Hispanic/Other respondents at 26% (Table 13).

Encourage Children to Enter the Industry: When laborers were asked if they would be likely to encourage their children to work in the feedyard industry, most of the Caucasian respondent noted 'yes' they would encourage their children (51%); in addition, result show that majority of Hispanic/Other responded similarly (43%). On the contrary, there were more Caucasians that would not encourage their children to pursue a career in the feedyard at 36%, and fewer responses from the Hispanic/Other employees (24%). These positions switch once again in Table 13, where there are more of the

Hispanic/Other respondents, 26% are unsure if they would promote their children to work in the cattle feeding industry, while 11% of Caucasians are 'unsure'.

Table 13. Frequencies by Ethnicity (Perceptions)

		Caucasian	Hispanic/Other	*P*-value
Q23. Do you feel like there is room for advancement in your employment?*				0.0650
	Yes	57.14	54.55	
	No	32.86	22.08	
	Unsure	10.00	23.38	
Q24. Would you be willing to take a promotion?*				0.0563
	Yes	79.45	65.79	
	No	9.59	7.89	
	Unsure	10.96	26.32	
Q25. Would you encourage your children to work in the feedyard industry?**				0.0105
	Yes	51.39	43.42	
	No	36.11	23.68	
	Unsure	12.50	32.89	

number=frequency percentage distribution.
*Comparisons differed at $P < 0.10$.
**Comparisons differed at $P < 0.05$.
***Comparisons differed at $P < 0.01$.

CHAPTER VI

Factors Affecting Employment Satisfaction

Through the Chi-Square analysis, significant differences have been identified within the labor survey data. These significant differences exist when analyzing the data by feedyard size, feedyard departments and by ethnicity. In an effort to further investigate employee job satisfaction as well as employee recruitment, regression models were developed to identify the factors which impact attitudes of respondents.

Methods and Procedures

In this section, the study evaluated the dependent variable, job satisfaction by utilizing data from all 152 survey observations collected. Furthermore, the study also analyzed the data by department. In total, six regression models were developed to ascertain the factors which impact satisfaction. Defined in Table 14, the dependent variable is employee satisfaction where the more satisfied the respondent is the higher the corresponding numeric indicator. Independent variables are defined in Table 15, and include gender (male or female), capacity of the feedyard, education, tenure, perceptions on advancement opportunities, parental encouragement, ethnicity (Hispanic/Other or Caucasian), laborer's age, a quadratic term for age, if their expectations have been met, if

they plan to retire, and willingness to accept a promotion. The dependent variables were grouped into ordinal responses for the employee, thus an ordered logit analysis is applied. An ordered logit model was chosen to predict the likelihood that an employee would be more or less satisfied on a nonlinear scale. Therefore, by utilizing this model we were able to utilize both observed, ordinal and interval, responses from the labor survey.

Within SAS, the proc QLIM procedure was used for the logit models estimated (SAS Institute). The statistical analysis attempted to determine if there was a significant relationship between laborers' demographics, perceptions, and opinions, and their respective level of job satisfaction.

It is important to note that many of the variables in the models were not asked on ordinal or binary scale in the survey, but were transformed into one for the purposes of this model. For example, job satisfaction was asked on a categorical scale for different levels of satisfaction from extremely satisfied to extremely dissatisfied. These responses were then transformed into numeral variables that represent each option from 1 – 7. Where 1 = extremely dissatisfied and 7 = extremely satisfied.

The initial model was developed for all labor survey responses. The following equation represents a generalized form of the job satisfaction model for the model including all observations.

(1) $$Prob(Laborer\ i\ increased\ satisfaction) = \frac{e^Z}{1+e^Z}$$

Where Prob *(Laborer i increased satisfaction)* is the probability of *laborer i* having increased satisfaction and the *increased satisfaction* is the associated ordinal value for

each independent variable. *e* is a mathematical constant, the base of the natural logarithm, which equals approximately 2.718281828. *Z* is

(2) $$Z = \alpha + \beta_1 male + \beta_2 scalecap + \beta_3 highschoolgrad + \beta_4 somecollege + \beta_5 collegegrad + \beta_6 tenure + \beta_7 advance + \beta_8 children$$

Where *male* is the gender of the laborer either 0 or 1, *scalecap* is the scaled capacity of the feedyard (capacity divided by 1,000), *highschoolgrad* is the level of education attained by the laborer either 0 or 1, *somecollege* is the level of education completed by the laborer either 0 or 1, *collegegrad* is the level of education completed by the laborer either 0 or 1, *tenure* is the number of years the laborer has been in the industry, *advance* is the perception of the laborer on whether or not there are advancement opportunities in the feedyard (1='no', 2='unsure', 3='yes'), *children* is whether the laborer would encourage their children to work in the feedyard industry(1='no', 2='unsure', 3='yes'). All dependent and independent variables, associated mean values, and category explanations are listed in Tables 14 & 15.

The following models were developed independently for each feedyard department. Here we utilized different independent variables for each model in order to optimize each department's model. Each model follows the above equation (1); however, to calculate *Z*, the independent variables are not identical.

For the cattle department, *Z* is calculated,

(3) $$Z = \alpha + \beta_1 tenure + \beta_2 coworkersatisfaction + \beta_3 advance + \beta_4 scalecap$$

Where *tenure* is the number of years the laborer has been in the industry, *coworkersatisfaction* is the level of satisfaction with the laborers' coworkers on a scale

from 1 -7 (1=extremely dissatisfied, 7=extremely satisfied), *advance* is the perception of the laborer on whether or not there are advancement opportunities in the feedyard from 1-3 (1='no', 2='unsure', 3='yes'), *scalecap* is the scaled capacity of the feedyard (capacity divided by 1,000).

For the feed department,

(4) $$Z = \alpha + \beta_1 tenure + \beta_2 coworkersatisfaction + \beta_3 expectation + \beta_4 scalecap$$

Where *tenure* is the number of years the laborer has been in the industry, *coworkersatisfaction* is the level of satisfaction with the laborers' coworkers on a scale from 1 -7 (1=extremely dissatisfied, 7=extremely satisfied), *expectation* is the response on whether the employees expectations have been met from 1-3 (1='no', 2='unsure', 3='yes'), *scalecap* is the scaled capacity of the feedyard (capacity divided by 1,000).

For the mill department,

(5) $$Z = \alpha + \beta_1 age + \beta_2 tenure + \beta_3 hispanic + \beta_4 promotion + \beta_5 scalecap$$

Where *age* is the age of laborer, *tenure* is the number of years the laborer has been in the industry, *hispanic* is the ethnicity of the laborer either 0 or 1, *promotion* is the responses on whether the employee would be willing to accept a promotion from 1-3 (1='no', 2='unsure', 3='yes'), *scalecap* is the scaled capacity of the feedyard (capacity divided by 1,000).

For the yard department,

(6) $$Z = \alpha + \beta_1 tenure + \beta_2 expectation + \beta_3 retire + \beta_4 hispanic$$

Where *tenure* is the number of years the laborer has been in the industry, *expectation* is the response on whether the employees expectations have been met from 1-3 (1='no',

2=‘unsure’, 3=‘yes’), *retire* is the response by the laborer on whether they plan to retire or not from 1-3 (1=‘no’, 2=‘unsure’, 3=‘yes’), *hispanic* is the ethnicity of the laborer either 0 or 1.

For the office department (GA),

(7) $$Z = \alpha + \beta_1 expectation + \beta_2 advance$$

Where, *expectation* is the response on whether the employees expectations have been met from 1-3 (1=‘no’, 2=‘unsure’, 3=‘yes’); *advance* is the perception of the laborer on whether or not there are advancement opportunities in the feedyard from 1-3 (1=‘no’, 2=‘unsure’, 3=‘yes’). All independent variables, associated mean values, and category explanations are listed in Table 15.

Table 14 . Factors Affecting Satisfaction, Willingness to be Promoted, and Parental Encouragement, Dependent Variable Definitions

Variable	Definition	Median	Quartile Dev	Mean	Std Dev
Job Satisfaction	Ranking of satisfaction with current position (1=extremely dissatisfied, 7=extremely satisfied)	6	±0.5		
Promotion	Frequency of laborers willing to accept a promotion (1=no, 2=unsure, 3=yes)	3	±0.5		
ParentalEncouragement	Frequency of laborers encouraging their children to enter the cattle feeding industry (1=no, 2=unsure, 3=yes)	2	±1.0		
ParentalEncouragement Yes	Frequency of laborers encouraging their children to enter the cattle feeding industry (0=no/unsure, 1=yes)			0.477	(0.501)
ParentalEncouragement Unsure	Frequency of laborers encouraging their children to enter the cattle feeding industry (0=no/yes, 1=unsure)			0.228	(0.421)

Table 15. Factors Affecting Satisfaction, Willingness to be Promoted, and Parental Encouragement, Independent Variable Definitions

Variable	Definition	Mean	Median	Std Dev	Quartile Dev
Male	Dummy variable (1=Male, 0=Female)	0.810		(0.394)	
ScaleCap	Number of cattle permitted in feedyard (8,000-85,000)/1000	44,453.642		(22,197.623)	
HighSchoolGrad	Dummy variable (1=high school graduate,0=non high school graduate)	0.306		(0.462)	
SomeCollege	Dummy variable (1=some college or two-year degree, 0=no college experience)	0.313		(0.465)	
CollegeGrad	Dummy variable (1=four-year degree or higher, 0=no four-year degree or higher)	0.190		(0.394)	
Tenure	Number of years in the industry (0-47)	14.809		(12.452)	
Advance	Dummy variable (1='no' no room for advancement, 2='unsure', 3='yes' room for advancement)		3		±1.0
Children	Dummy variable (1='no' would not encourage children, 2='unsure', 3='yes' would ecourage children)		3		±1.0
Hispanic	Dummy variable (1=Hispanic/Latino/Native American/African American, 0=Caucasian)	0.497		(0.502)	
Age	Age of laborer in years (18-73)	42.191		(14.627)	
AgeQuad	Age of laborer as a quadratic term (324-5,329)	1,992.600		(1,259.950)	
Expectation	Dummy variable (1='no' expectations not met, 2='unsure', 3='yes' expectations met)		3		±0.5
Retire	Dummy variable (1='no' no plans to retire, 2='maybe', 3='yes' plans to retire)		2		±0.5
Coworker Satisfaction	Level of satisfaction with coworkers on a likert scale from 1-7 (1=extremely dissatisfied, 7=extremely satisfied)		6		±0.5
Training Satisfaction	Level of satisfaction with training and education on a likert scale from 1-7 (1=extremely dissatisfied, 7=extremely satisfied)		6		±1.0
Promotion	Dummy variable (1='no' would not take a promotion, 2='unsure', 3='yes' would accept promotion)		3		±0.5

Results of Job Satisfaction Models

Of the independent variables selected, several significant relationships resulted. A full summary of the results for each model (statistically significant independent variables, coefficients, and standard errors) are listed in Tables 16 & 17.

Among the independent variables, significance was identified in *tenure*, *education*, and *scalecap* (feedyard size). These three variables throughout the six different models held different levels of significance; however, all of them were significant at $P < 0.01$ in at least one model (Table 16 & 17). It is important to note the coefficients do not represent the marginal effect, however the sign lends itself to interpretation.

Full Survey Data Model: When evaluating the variables which are significant in predicting job satisfaction across all 152 survey responses, results showed that men, feedyard size (*scalecap*), and education levels (*highschoolgrad*, *somecollege*, and *collegegrad*) when compared to a non-high school graduate all lead to declining job satisfaction. Note, *highschoolgrad* was not significant in Table 16, however the negative sign in the coefficient assumes that it has a negative effect on satisfaction.

Overall, laborers with increased tenure in the cattle feeding industry, who agree there is an opportunity to advance, and who is more willing to encourage their children to work in the feedyard industry are more likely to be satisfied in their position.

Table 16. Factors Affecting Job Satisfaction, Logit Model Results (all responses)

Dependent Variable	Significant Independent Variables	Coefficient	Standard Error	*P*-value
Job Satisfaction (1=extremely dissatisfied, 7=extremely satisfied)				
	Male	-0.553**	(0.642)	0.0309
	ScaleCap	-0.012***	(0.256)	0.0077
	HighSchoolGrad	-0.465	(0.315)	0.1398
	SomeCollege	-0.790*	(0.314)	0.0119
	CollegeGrad	-0.603*	(0.340)	0.0760
	Tenure	0.0195**	(0.008)	0.0285
	Advance	0.381***	(0.120)	0.0021
	Children	0.229*	(0.122)	0.0620

* Significance levels where $P = 0.1$.
** Significance levels where P = 0.05.
*** Significance levels where P = 0.01.

Cattle Department: In the cattle department (Table 17), the model indicated *tenure* and *coworker satisfaction* had the most significant relationship with job satisfaction. Each of the two variables had a positive sign, and were significant at a $P < 0.01$. An explanatory factor may root from the traditional hierarchy cowboys operate by, where the more seniority a person has the more respect that person receives. In addition, laborers who felt like there was room for advancement in their job had a positive relationship with job satisfaction. On the other hand, feedyard capacity was not significantly significant, but did tend to have a negative effect on a laborer's satisfaction as feedyard size increases (Table 17).

Feed Department: Job satisfaction pertaining to the feed department employees resulted with significance in *tenure* and *coworker satisfaction*. However, contrary to the cattle department, the independent variable '*tenure*' switches signs, thus suggesting a

decline in satisfaction. In the model this is outweighed by feedyard capacity which yields more significance, and follows suit with the positive sign similarly found in the cattle department. Increased size of feedyards may have less satisfaction across their employees in this department due to the additional workload and team work that comes with feeding additional cattle. Therefore, feed department employees hours and responsibilities may increase. The model's independent variables which lead to an increase satisfaction are *coworker satisfaction*, and *expectation*. It seems as if these laborers enjoy their coworkers and their expectations have been met, their level of satisfaction will improve (Table 17).

Mill department: Three independent variables were significantly related to job satisfaction for mill employees. *Age* was the most significant independent variable in the mill department model, as age of the laborer increased, their satisfaction also increased. This was followed by ethnicity and their willingness to take a promotion. Both characteristics led to increased satisfaction for mill department employees. On the other hand, *tenure*, had a negative relationship with satisfaction. *Tenure* was less significant compared to the three positive coefficient variables, and feedyard size did not have a significant relationship, but did have a negative coefficient (Table 17).

Office/General Administration Office: In the office department (Table 17), only one independent variable indicated to be significantly related to job satisfaction. One variable which had a positive relationship with job satisfaction was the employee's expectations being met. This suggests that if office department employees' have expectations met, then an increase in job satisfaction among those individuals is likely. If an employee feels like there is an advancement opportunity this aids in job satisfaction.

In this model however, the variable *advance* tended to be significant but did not have a *P*-value less than 0.10.

Table 17. Factors Affecting Job Satisfaction, Logit Model Results (by department)

Dependent Variable	Significant Independent Variables	Coefficient	Standard Error	*P*-value
Job Satisfaction (1= extremely dissatisfied, 7=extremely satisfied)				
Cattle Department				
	Tenure	0.049***	(0.016)	0.0022
	CoworkerSatisfaction	0.498***	(0.182)	0.0061
	Advance	0.593**	(0.248)	0.0166
	ScaleCap	-0.012	(0.314)	0.1833
Feed Department				
	Tenure	-0.046**	(0.022)	0.0359
	CoworkerSatisfaction	0.588***	(0.184)	0.0014
	Expectation	0.781**	(0.332)	0.0188
	ScaleCap	-0.030***	(0.011)	0.0047
Mill Department				
	Age	0.369***	(0.131)	0.0048
	Tenure	-0.183*	(0.093)	0.0503
	Hispanic	2.500**	(1.261)	0.0474
	Promotion	1.957**	(0.797)	0.0141
	ScaleCap	-0.028	(0.023)	0.2177
Yard Department				
	Tenure	0.078*	(0.040)	0.0501
	Expectation	0.883*	(0.503)	0.0789
	Retire	0.973*	(0.541)	0.0723
	Hispanic	1.144	(0.750)	0.1270
Office (GA) Department				
	Expectation	0.900**	(0.433)	0.0377
	Advance	0.350	(0.233)	0.1341

* Significance levels where *P* = 0.1.
** Significance levels where *P* = 0.05.
*** Significance levels where *P* = 0.01.

Summary and Interpretations of Satisfaction Models

In summary, results indicated that feedyard size had a significant relationship with job satisfaction overall and in several departments. Importantly, each time feedyard size was incorporated into the model, the coefficient yield a negative relationship with satisfaction. This leads us to believe that larger feedyards may struggle more with keeping employees satisfied with their jobs, which could lead to increased turnover.

Additionally, the model associated with all the survey responses, yielded a negative relationship between a laborer's level of education and their respective satisfaction. Whereas, the base variable for the model was a non-high school graduate compared to high school graduates, some college experience or a two-year degree, and an employee with a four-year college degree or higher. We can conclude that compared to non-high school graduates, a laborer who has college experience or any form of degree is more likely to be dissatisfied with their job in the feedyard industry. It is important to note that this question was pertaining directly to job satisfaction, not satisfaction with the laborer's career choice.

The respondents' attitude toward advancement opportunities was shown to be significantly related in several models estimated. In the overall model, the cattle department model and the general administration model, this variable consistently had a positive significant relationship with satisfaction. Thus, if employees have increased perception of career advancement, this could potentially lead to increased job satisfaction.

Tenure in the feedyard industry had in the full model a positive relationship with the level of job satisfaction. Therefore, an employee with increased years in the industry may be a better fit in these departments. On the other hand, in the feed and mill departments, the model shows that tenure had a negative relationship with job satisfaction.

Lastly, feedyard laborer's level of job satisfaction had significant relationships with the different departments and with feedyard size; however, one model indicated that a there was a significant relationship between ethnicities. Specifically, the Hispanic/Other variable defining ethnicity, was only significant in the mill department. Here the sign was positive, thus yielding a positive significant relationship with job satisfaction in mill department employees.

Factors Affecting Willingness to Accept Promotion & Encourage Children to Join the Feedyard Workforce

After analyzing the variables which impact the level of job satisfaction, models were developed to focus on the willingness for both promotion and children encouragement (Table 18). All 152 surveys were used in these two ordered logit models.

Methods and Procedures

In this section, the study evaluated the dependent variables, promotion and parental encouragement, based on the data assessed from all survey observations. Independent variables and dependent variables are defined in Tables 14 and 15. Independent variables include *Hispanic*, *age* of the laborer, a quadratic term based on age

of the laborer, *tenure*, education (*highschoolgrad* and *somecollege*), *expectation*, and *retire*. The dependent variables were grouped into ordinal responses for the employee, thus an ordered logit analysis is applied.

Within SAS, the proc QLIM procedure was used for the logit models estimated (SAS Institute). The statistical analysis attempted to determine if there was a significant relationship between laborers' demographics, perceptions, and opinions, and their respective willingness to accept a promotion and encourage their children to pursue a career in the cattle feeding industry.

It is important to note that many of the variables in the models were not asked on ordinal or binary scale in the survey, but were transformed into one for the purposes of this model. Here we analyze the survey data as a whole with all the observations. The following equation represents a generalized form of the promotion model including all observations. Three is recognized as the "recommended" or "ideal" willingness of a laborer and one represents the least ideal willingness of a laborer to accept a promotion. A reference to the dependent variables and associated mean values are listed in Table 14.

(8) $$Prob(Laborer\ i\ accept\ promotion) = \frac{e^Z}{1+e^Z}$$

Prob *(Laborer I accept promotion)* is the probability of *laborer i* being willing to accept a promotion if offered and the *accept promotion* is the associated ordinal value for each independent variable. *e* is a mathematical constant, the base of the natural logarithm, which equals approximately 2.718281828. *Z* is

(9) $$Z = \alpha + \beta_1 hispanic + \beta_2 age + \beta_3 agequad + \beta_4 tenure + \beta_5 somecollege + \beta_6 expectation + \beta_7 retire$$

Hispanic is the variable that signifies if the laborer is Hispanic/Other or not (either 0 or 1); *age* is the age of the laborer; *agequad* is the quadratic term of age of the laborer; *tenure* is the number of years the laborer has been in the industry; *somecollege* is the level of education completed by the laborer (either 0 or 1); *expectation* is the response to whether the employees expectations have been met from 1-3; *retire* is the response by the laborer on whether they plan to retire or not from 1-3. All independent variables, associated mean values, and category explanations are listed in Table 15.

Additionally when modeling for the willingness of laborers to encourage their children to work in the feedyard industry, similar models were used to aid in predicting the probability that a laborer would encourage their children into the cattle feeding industry. For the purpose of this question, three different models were ran, each with a different dependent variable. In the first model (Table 19) the dependent variable was coded to represent all three possible response of the laborer (1=no, 2=unsure, 3=yes). In the second model, the dependent variable was transformed to better predict if a laborer would definitely ("yes") encourage their children to work in the industry. Lastly, the third model was created to predict the factors that would lead to a laborer being 'unsure' if they would be willing to encourage their children to work in the feedyard industry. The following equation represents a generalized form of the parental encouragement model including all observations.

(10) $Prob(Laborer\ i\ parental\ encouragement) = \frac{e^Z}{1+e^Z}$

Prob *(Laborer I parental encouragement)* is the probability of *laborer i* being willing to encourage their child to pursue work in the feedyard industry and the *parental encouragement* is the associated binary value for each independent variable. *e* is a mathematical constant, the base of the natural logarithm, which equals approximately 2.718281828. In the first model, *Z* is

(11) $Z = \alpha + \beta_1 age + \beta_2 highschoolgrad + \beta_3 retire + \beta_4 expectation$

Three is recognized as the "recommended" or "ideal" willingness of a laborer and one represents the least ideal willingness of a laborer to accept a promotion.

In the second model, Z is.

(12) $Z = \alpha + \beta_1 age + \beta_2 highschoolgrad + \beta_3 retire + \beta_4 expectation$

One is recognized as the "recommended" or "ideal" willingness of a laborer and zero represents the least ideal willingness of a laborer to accept a promotion.

(13) $Z = \alpha + \beta_1 hispanic + \beta_2 age + \beta_3 highschoolgrad + \beta_4 retire + \beta_5 expectation$

Hispanic is the variable that signifies if the laborer is Hispanic/Other or not (either 0 or 1); *age* is the age of the laborer; *highschoolgrad* is the level of education completed by the laborer (either 0 or 1); *retire* is the response by the laborer on whether they plan to retire or not from 1-3 (1='yes', 2='maybe', 3='no'), *expectation* is the response on whether the employees expectations have been met from 1-3 (1='yes', 2='maybe', 3='no'). All independent variables, associated mean values, and category explanations are listed in Table 15.

Results of Willingness to Accept Promotion & Encourage Children Models

Promotion: When examining the variables related to an employee being willing to accept a promotion, results show that five of the seven independent variables had a significant relationship. The dependent variable represented the willingness of the employee with one being the lowest score and three being the most likely score to accept a promotion. In addition, the model indicated that ethnicity, specifically *hispanic* had no significant relationship with the probability; however, the coefficient was negative, thus representing a negative relationship with accepting a promotion. *Age* had no significant relationship, but when we transformed age into a quadratic term (*agequad*) a negative significance resulted, therefore, younger employees may be more likely to take a promotion, whereas older employees that are nearing the end of their career would have a higher probability of not accepting a promotion (Table 18). The model resulted in (Table 18) *tenure* along with the quadratic term for age (*agequad*) as having a positive relationship with a laborer not accepting a promotion. On the contrary, a laborer whose

characteristics are in line with one that has *somecollege* experience, with met expectations (*expectation*), and who may be more willing to *retire*, might be among the laborers seeking and willing to accept a promotion.

Parental Encouragement: In the first model, the study shows the dependent variable on a scale from one to three; where one represents a less likely probability of a laborer encouraging their children and three a more likely probability to encourage their children into the feedyard industry. In this model, results find that *age* and high school graduates (*highschoolgrad*) negatively affect the probability of a laborer encouraging the next generation of feedyard employees. As for the next model, where the dependent variable is more concentrated on the factors that lead to an employee's probability to discretely encourage their children into the feedyard industry, the results show that the same two independent variables (*age* and *highschoolgrad*) also have a negative relationship with the dependent variable. In the last model, only one independent variable had a significant relationship with the dependent variable. This models was focused on the probability of a laborer being 'unsure' whether or not they would encourage their children to pursue a career in the feedyard industry. Results show that *Hispanic* had a positive relationship with predicting what laborer would be 'unsure' in this decision. As for the other variables, the characteristics of an employee whose expectations had been met and that would plan on retiring at their feedyard shows an increased probability of them encouraging their children to follow their own career path. (Table 19).

Table 18. Factors Affecting Promotion, Logit Model Results (all responses)

Dependent Variable	Significant Independent Variables	Coefficient	Standard Error	*P*-value
Promotion (1=no, 2=unsure, 3=yes)				
	Hispanic	-0.211	(0.265)	0.4262
	Age	0.084	(0.057)	0.1422
	AgeQuad	-0.001*	(0.001)	0.0576
	Tenure	-0.038**	(0.015)	0.0146
	SomeCollege	0.664**	(0.315)	0.0350
	Expectation	0.352**	(0.174)	0.0428
	Retire	0.429*	(0.222)	0.0535

* Significance levels where *P* = 0.1.
** Significance levels where *P* = 0.05.
*** Significance levels where *P* = 0.01.

Table 19. Factors Affecting Parental Encouragement, Logit Model Results (all responses)

Dependent Variable	Significant Independent Variables	Coefficient	Standard Error	*P*-value
Parental Encouragement				
(1=no, 2=unsure, 3=yes)	*Age*	-0.040***	(0.009)	<.0001
	HighSchoolGrad	-0.639***	(0.234)	0.0063
	Retire	0.971***	(0.203)	<.0001
	Expectation	0.369**	(0.155)	0.0173
Parental EncouragementYes				
(0=no,unsure, 1=yes)	*Age*	-0.033***	(0.010)	0.0009
	HighSchoolGrad	-0.666**	(0.264)	0.0116
	Retire	0.881***	(0.230)	0.0001
	Expectation	0.384**	(0.180)	0.0324
Parental EncouragementUnsure				
(0=no,yes, 1=unsure)	*Hispanic*	0.469*	(0.250)	0.0601
	Age	-0.005	(0.010)	0.5817
	HighSchoolGrad	0.133	(0.267)	0.6178
	Retire	0.082	(0.219)	0.7075
	Expectation	-0.042	(0.179)	0.8152

* Significance levels where *P* = 0.1.
** Significance levels where *P* = 0.05.
*** Significance levels where *P* = 0.01.

Summary and Interpretations of Willingness to Accept Promotion & Encourage Children Models

In summary, the dependent variables were selected in order to better predict the labor force's willingness to take the next step in the industry. Laborers that are not willing to accept a promotion should most likely not be promoted, because this could deteriorate the culture of the feedyard as a whole. In reference to Dr. McGregor's perception of the feedyards' labor force, where an inaccurate selection in hiring can cause deterioration in the team and the feedyard as a whole (McGregor, 2019). This model could aid managers to select the appropriate person for a potential promotion.

As for the models representing the willingness of a feedyard laborer to encourage their children to work in the cattle feeding industry, we found a few characteristics where an employee could be more likely to engage next generation of feedyard employees. Thus, creating an alternative recruiting method, in order to provide sustainability to the industry. Whereas, managers with employees who are less likely to encourage their children to participate in the feedyard industry leads to the question: where will the next generation of employees derive from once the current generation is retired?

CHAPTER VII

CONCLUSIONS

Within the feedyard industry there are several roles which could potentially be viewed as monotonous to feedyard laborers. Delivering feed to cattle, riding pens, duplicating rations and treating sick cattle are necessary daily activities. Many of these roles are essential to fulfilling the purpose of producing quality cattle, which in turn produce quality meat to be sold to the consumer. As labor supplies decrease, and the cost of technology increases, feedyard managers are faced with difficult positions on whether to hire the next warm body that walks through the door, or invest that capital into technological advances that could replace human resources. In this study, our research shows several differences addressing the characteristics found in the demographics, satisfaction levels, and perceptions of the workforce across the feedyard industry. By initially taking the time to seek feedback and insights from feedyard managers, the true issues facing the industry were better addressed. With little to no literature pertaining to the feedyard labor force, our objectives of obtaining knowledge and understanding of the workforce was accomplished.

Additionally, once managers expressed their challenges generally are not derived from the feedyard as a whole, but instead rooted more within the different departments.

We were able to break down a strong set of data collected from both primary sources, the feedyard managers and the feedyard employees. Here we noted that there were several significant differences throughout different feedyard structures, sizes, the different departments, and among the two primary ethnicities that make up the labor force in this industry, Hispanic/Other and Caucasians.

Through deeper understanding of the differences that can be found in the labor populations in the cattle feeding industry, this study was able to focus on modeling job satisfaction for employees. In addition, the study was able to capitalize on individual characteristics that lead to a laborer's likelihood to accept a promotion and encourage their children to follow in their footsteps.

It is fully recognized not all feedyards are identical, nor are their cultures, employees, or leadership resources. Therefore, this study does not identify the key to solving all hiring and retention challenges in the industry, but it does provide the foundation for additional studies to be created with the goal of enhancing this particular aspect of the industry. Managers throughout the industry have their individual challenges, and while studies pertaining to the scientific advancement of cattle feeding efficiencies exist, very little labor assessment has been completed. This is one of the first studies dedicated to understanding the role of human resources in the production of wholesome cattle for the region and the world.

Recommendations for industry managers are to understand where the challenges they face are arising from, and truly developing the understandings of what motivate their employees. Programs and support groups such as TFCA, it is important that value is being invested into the development of people within the feedyard structure. Without the

people, cattle would not be fed, water tanks would not be serviced, sick cattle would not be treated, and the animal would never make it to the end consumer. The industry can add value to the feedyard managers and management teams by initiating new development programs which focus on leadership, human resource management, bridging the gap between the different cultures, and conflict resolution.

Understanding more about the relationship between feedyard managers and the feedyard employees could be a key area of study in the future. In this study we did not explicitly elicit the laborer's perspective of satisfaction with feedyard management or vice versa. Future studies that focus on the feedyard managers, and the middle managers, such as department managers, could analyze their leadership values and qualities, and how those increase or decrease labor efficiency could lead to innovative ways to motivate and personalize labor efficiency at the individual level. In addition, by developing new practices which minimize human labor and maximize labor efficiency the gap between the declining number of willing and qualified employees and amount of labor needed to produce a product could narrow.

This study provided baseline understandings of where managers have difficulty with personnel and challenges within their human resource management responsibilities. In conjunction, by utilizing these challenges, and sourcing data from the primary source, laborers we were able to learn more about the overall culture held in the industry, and where there could be differences among individuals. Knowing the industry's human capital, and their differences, allows this data analysis to be a benchmark in facilitating future development and growth for the industry as a whole.

References

Bewley, J., R. W. Palmer, and D. B. Jackson-Smith. 2001. "Modeling Milk Production and Labor Efficiency in Modernized Wisconsin Dairy Herds." *Journal of Dairy Science.* 84:705-716.

Birch, J., and K. Brooks. 2015. "2015 Nebraska Feedyard Labor Cost Benchmarks and Historical Trends." Unpublished, University of Nebraska.

Bitsch V. and N. Olynk. 2008. "Risk-Increasing and Risk-Reducing Practices in Human Resource Management: Focus Group Discussions with Livestock Managers." *Journal of Agricultural and Applied Economics.* 40,1:185-201.

Bitsch V., G.A. Kassa., S.B. Harsh,. And A.W. Mugera. 2006. "Human Resource Management Risks: Sources and Control Strategies Based on Dairy Farmer Focus Groups." *Journal of Agricultural and Applied Economics.* 38,1:123-136.

Coff, R. W. 1997. "Human Assets and Management Dilemmas: Coping with Hazards on the Road to Resource-Based Theory." *Academy of Management Review*. 22:374-402.

Durst, P., Moore, S., Ritter, C. and Barkema, H. 2018. "Evaluation by Employees of Employee Management on Large US Dairy Farms." Journal of Dairy Science. 101:7450-7462.

Elliott, K. 2017. "A Panhandle town filled with feedyard tradition" *Progressive Cattleman*. Web.

Eskine, R. J., R. O. Martinez., and G.A. Contreras. "Cultural Lag: A New Challenge for Mastitis Control on Dairy Farms in the United States." Journal of Dairy Science. 98 (2015): 8240-8244.

Herzberg, F., Mausner, B., & Snyderman, B. 1959. *The Motivation to Work*.

Koch, M. J., and R. G. McGrath. 1996. "Improving Labor Productivity: Human Resource Management Policies do Matter." *Strategic Management Journal.* 17, 5:335-354.

McGregor, S. "Leadership: The Good, the Bad and the Ugly" *Drovers.* Web.

Pinder, C. 1984. *Work Motivation: Theory, Issues, and Applications*.

Ramlall, S. 2004. "A Review of Employee Motivation Theories and their Implications for Employee Retention within Organizations." *Journal of American Academy of Business, Cambridge*. 5, 1/2:52-63.

Ramos, A., Carlo, G., Grant, K. Bendixsen, C., Fuentes, A., and Gamboa, R. 2018. "A Preliminary Analysis of Immigrant Cattle Feedyard Worker Perspectives on Job-Related Safety Training." *Safety*. 4, 17.

Rutherford, B., 2011. "Feedyard Personnel Management an Ongoing Challenge," *Beef Magazine.* Web.

SAS Institute Inc., SAS 9.4, Cary, NC.

TCFA. Texas Cattle Feeders Association. July, 2019.

USDA-NASS. United States Department of Agriculture. National Agricultural Statistics Service.

USDA. United States Department of Agriculture. Cattle Inventory Report. (January 31, 2018.)

Wagner, J., Achibeque, S., and Feuz, D. 2014."The Modern Feedlot for Finishing Cattle." *Annual Review of Animal Biosciences.* 2:535-554.

"2018 Beef Spotter." *Spotter Publications*. 2018.

Appendix A

Manager Survey

TCFA Feedyard Manager Survey Final

Start of Block: Default Question Block

Q68 Thank you for your participation in this study. Your participation is completely voluntary. Refusal to participate does not affect any benefits to which you are otherwise entitled. In participating, you will assist us in our research regarding labor retention and recruitment challenges within the cattle feeding industry. Your responses herein will remain completely confidential, and will be analyzed for academic research purposes, along with an overarching purpose to provide input on improving recruitment and retention in the cattle feeding industry. The information collected will be stored on a secure server and will be downloaded and removed shortly after data collection ends. In this study, you will be asked a series of questions regarding labor retention and recruitment. There is no direct benefit to you, but your participation will benefit future strategies and decisions in the feedyard industry. This research has been approved by the Institutional Review Board at West Texas A&M University. If you have any concerns about this study or your rights, you can contact Dr. Angela Spaulding, Vice President for Research and Compliance and Dean of Graduate Studies at 806.651.2730. Thank you again for your participation. Should you have any questions and/or wish to review summary findings, please contact Dr. Mallory K. Vestal at 806.651.2718. By clicking Yes below, you indicate that you agree to participate in this study. By clicking No, you are free to exit the survey. In either regard, we sincerely thank you for your time. Dr. Mallory K. Vestal, West Texas A&M University Dr. Bridget L. Guerrero, West Texas A&M University Dr. Ty Lawrence, West Texas A&M University Garrett D. Robinson, West Texas A&M University

○ Yes, I am willing to complete this survey. (1)

○ No, I am not willing to complete this survey. (2)

Skip To: End of Survey If No, I am not willing to complete this survey. *Thank you for your participation in this study. Your pa... =*

Q1 What is the structure of the feedyard you currently manage?

- ○ Corporate Feedyard (1)
- ○ Customer Feedyard (2)

Q67 What is the zip code your feedyard is located in?

_____

Q2 What is the capacity of the feedyard you manage?

0 10 20 30 40 50 60 70 80 90 100110120130140150

Capacity (head in 1000s) ()	

Q52 What tasks do you out-source to reduce your need for on-site labor?

Tasks that my Feedyard Out-Sorces
_____ Tank Washing (1) (1)
_____ Farming (2) (2)
_____ Processing (3) (3)
_____ Sorting (4) (4)
_____ Loading (5) (5)

_____ Lagoon Service (6) (6)

_____ Mill Service (7) (7)

_____ Maintenance on Equipment (8) (8)

_____ Feed Mill Operations (9) (9)

_____ Cattle Procurement (10) (10)

_____ Fat Cattle Marketing (11) (11)

_____ Silage Packing (12) (12)

_____ High Moisture Corn Grinding/Packaging (13) (13)

_____ Environmental Compliance (14) (15)

_____ Nutritionist Consultation (15) (16)

_____ Veterinarian Consultation (16) (17)

_____ Other (17) (14)

Page Break

Q4 What is your age?

- ○ Under 18 (1)
- ○ 18 - 24 (2)
- ○ 25 - 34 (3)
- ○ 35 - 44 (4)
- ○ 45 - 54 (5)
- ○ 55 - 64 (6)
- ○ 65 - 74 (7)
- ○ 75 - 84 (8)
- ○ 85 or older (9)

Q5 How many years have you managed a feedyard?

	0 5 10 15 20 25 30 35 40 45 50
Number of years you have managed a feedyard ()	

Q6 How many years have you managed your current feedyard?

0 5 10 15 20 25 30 35 40 45 50

Number of years you have managed your current feedyard ()	

Q7 How many years have you been in a management role in any aspect of the feedyard?

0 5 10 15 20 25 30 35 40 45 50

Number of years actively in a management role ()	

Q8 On the average day, how many hours are you working on feedyard business?

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

Hours working on feedyard business ()	

Q9 On a one-way commute, in miles, how far do you travel to your feedyard?

0 10 20 30 40 50 60 70 80 90 100

Number of miles to commute ()	

Q47 What is the highest level of education that you have completed?

- ○ Did not complete high school (1)
- ○ High school graduate (2)
- ○ Some college (3)
- ○ 2 year degree (4)
- ○ 4 year degree (5)
- ○ Professional degree (6)
- ○ Doctorate (7)

Q23 On a scale, how satisfied are you with your job?

- ○ Extremely satisfied (1) (1)
- ○ Moderately satisfied (2) (2)
- ○ Slightly satisfied (3) (3)
- ○ Neither satisfied nor dissatisfied (4) (4)
- ○ Slightly dissatisfied (5) (5)
- ○ Moderately dissatisfied (6) (6)
- ○ Extremely dissatisfied (7) (7)

Q24 Please respond true or false on the following statements:

	True (1)	False (2)
I feel as if I am respected by my employees (1)	○	○
I feel as if my employees enjoy working with me (2)	○	○
I feel like there are areas where I can improve (3)	○	○

Q28 On a scale from 1 to 9, how much stress is associated with being a manager? (1, being the least; 9, being the most)

	No Stress							Excessive Stress	
	1	2	3	4	5	6	7	8	9
Amount of stress ()									

Q51 What are the reasons you became a feedyard manager? (select all that apply)

- ☐ Passion for cattle feeding (1) (1)
- ☐ Family heritage (2) (2)
- ☐ Work environment (3) (3)
- ☐ Salary (4) (4)
- ☐ Location of employment (5) (5)
- ☐ Coworkers (6) (6)
- ☐ General desire to be in the agriculture industry (7) (7)
- ☐ Other (8) (8) _____

Q52 Which answer best describes your family background?

- ○ Urban (1) (1)
- ○ Farm/Ranch (2) (2)
- ○ Cattle Feeding (3) (3)
- ○ Dairy (4) (4)
- ○ Hogs (5) (5)
- ○ Other (6) (6) _____

Page Break

Q74 Do you currently have difficulty hiring employees with the training needed for your feedyard?

	Lots of Difficulty (1)	Somewhat Difficulty (2)	Neutral (3)	Little Difficulty (4)	No Difficulty (5)	Not Applicable (6)
General Administration (office staff) (1)	○	○	○	○	○	○
Mill Department (2)	○	○	○	○	○	○
Feed Department (3)	○	○	○	○	○	○
Cattle Department (4)	○	○	○	○	○	○
Yard Department (5)	○	○	○	○	○	○

Q75 Do you currently have difficulty retaining employees in your feedyard?

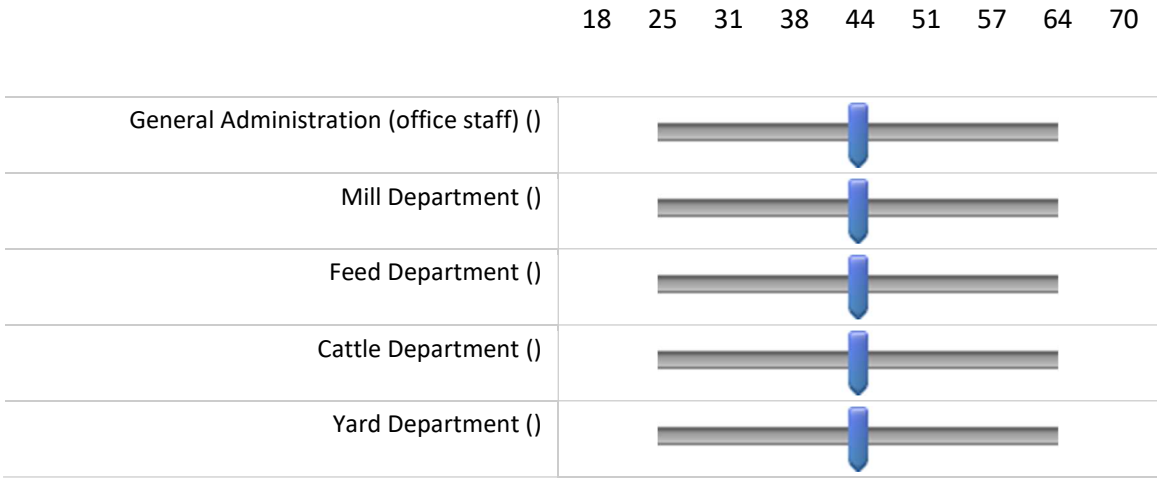
	Lots of Difficulty (1)	Somewhat Difficult (2)	Neutral (3)	Little Difficulty (4)	No Difficulty (5)	Not Applicable (6)
General Administration (office staff) (1)	○	○	○	○	○	○
Mill Department (2)	○	○	○	○	○	○
Feed Department (3)	○	○	○	○	○	○
Cattle Department (4)	○	○	○	○	○	○
Yard Department (5)	○	○	○	○	○	○

Q61 What is the average number of laborers you employ by department?

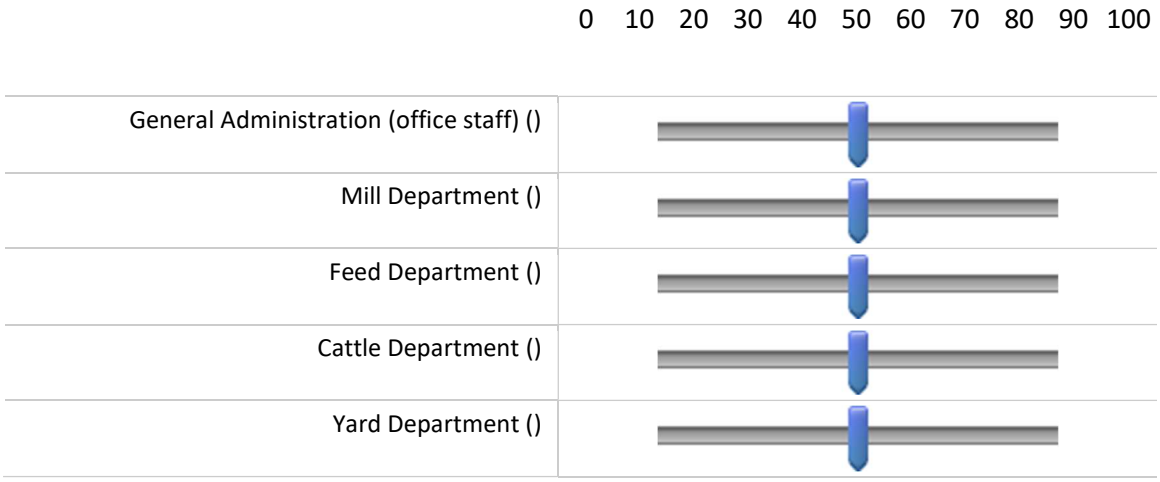
0 1 2 3 4 5 6 7 8 9 10111213141516171819 20

General Administration (office staff) ()	
Mill Department ()	
Feed Department ()	
Cattle Department ()	
Yard Department ()	

Q20 What is the average age of your employees by department?



Q62 What percentage of your labor force are natural born U.S. citizens, by department?



Q11 Do you utilize the E-Verify program?

- ○ Yes (1)
- ○ No (2)

Q14 On the average day, how many hours do you spend in direct contact with your employees?

- ○ 0 (0)
- ○ 1 (1)
- ○ 2 (2)
- ○ 3 (3)
- ○ 4 (4)
- ○ 5 (5)
- ○ 6 (6)
- ○ 7 (7)
- ○ 8 (8)
- ○ 9 (9)
- ○ 10 (10)

Q15 On the average day, how many hours do you spend educating your employees?

- ○ 0 (0)
- ○ 1 (1)
- ○ 2 (2)
- ○ 3 (3)
- ○ 4 (4)
- ○ 5 (5)
- ○ 6 (6)
- ○ 7 (7)
- ○ 8 (8)
- ○ 9 (9)
- ○ 10 (10)

Q13 On a scale from (1-5) how well do you know your employees? (1, being the highest knowledge and 5, being the lowest knowledge)

	Extremely well (1) (1)	Somewhat well (2) (2)	Neutral (3) (3)	Somewhat poor (4) (4)	Extremely poor (5) (5)
Overall (1)	○	○	○	○	○
Personality (2)	○	○	○	○	○
Strengths (3)	○	○	○	○	○
Weaknesses (4)	○	○	○	○	○

Q21 How many one-on-one meetings do you have with department managers every month?

- ○ 0 (0)
- ○ 1 (1)
- ○ 2 (2)
- ○ 3 (3)
- ○ 4 (4)
- ○ 5 (5)
- ○ 6 (6)
- ○ 7 (7)
- ○ 8 (8)
- ○ 9 (9)
- ○ 10 (10)

Q22 How many one-on-one meetings do you have with laborers every month?

- ○ 0 (0)
- ○ 1 (1)
- ○ 2 (2)
- ○ 3 (3)
- ○ 4 (4)
- ○ 5 (5)
- ○ 6 (6)
- ○ 7 (7)
- ○ 8 (8)
- ○ 9 (9)
- ○ 10 (10)

Q25 Please select the following benefits/incentives your feedyard offers its employees:

- ☐ Auto (1) (1)
- ☐ Housing (2) (2)
- ☐ Cell Phone (3) (3)
- ☐ Health Insurance (4) (4)
- ☐ Life Insurance (5) (5)
- ☐ Disability Insurance (6) (6)
- ☐ Retirement Plan (7) (7)
- ☐ Profit-Sharing (8) (8)
- ☐ Stock Options in Company (9) (9)
- ☐ Safety Incentive Programs (10) (11)
- ☐ Other (11) (10) _____

Q63 How do your employees earn time off?

- ☐ Based on length of service (1) (1)
- ☐ Set number of days (2) (2)
- ☐ Donating hours between employees (3) (3)
- ☐ No time off plan (4) (4)
- ☐ Other (5) (5) _____

Q64 Do the employees use the time off that they have earned?

- ○ Yes (1)
- ○ No (2)

Q26 On average, what is the percentage of your employees who enroll family members in health insurance benefits?

	0 10 20 30 40 50 60 70 80 90 100
Percentage of employees with family members enrolled in health insurance benefits ()	

Q27 What is the percentage of your employees that enroll in retirement plan benefits?

0 10 20 30 40 50 60 70 80 90 100

Percentage of employees that enroll in retirement plan benefits ()	

Q29 What percentage of your employees participate in incentive programs? (low death loss incentive, safety bonuses, etc.)

0 10 20 30 40 50 60 70 80 90 100

Percentage of employees participating in incentive programs ()	

Q43 Rank, which methods represent what motivates your employees most effectively:

_____ Fun Atmosphere (1)
_____ Monetary Incentives (2)
_____ Praise and Recognition (3)
_____ Challenging Skills and Opportunities (4)
_____ Principles and Goals (5)

Q31 On average, what is the annual percentage of the turnover for each department?

0 10 20 30 40 50 60 70 80 90 100

General Administration (office staff) ()	
Mill Department ()	
Feed Department ()	
Cattle Department ()	
Yard Department ()	

Q32 Rank from highest (1) to lowest (5), which department (Feeding, Milling, Yard Maintenance, Cattle, General Administration) has the best employee retention?

_____ Feeding (1)
_____ Milling (2)
_____ Yard Maintenance (3)
_____ Cattle (4)
_____ General Adminstration (5)

Q33 Rank from highest (1) to lowest (5), which department (Feeding, Milling, Yard Maintenance, Cattle, General Administration) is most challenging for employee retention?

_____ Feeding (1)
_____ Milling (2)
_____ Yard Maintenance (3)
_____ Cattle (4)
_____ General Administration (5)

Q34 Rank from highest (1) to lowest (5), which department (Feeding, Milling, Yard Maintenance, Cattle, General Administration) takes the greatest amount of your time/attention?

_____ Feeding (1)
_____ Milling (2)
_____ Yard Maintenance (3)
_____ Cattle (4)
_____ General Administration (5)

Q35 Rank from highest (1) to lowest (4), what is the reason you spend most of your time with that department?

_____ Training (Developing Employees in the Department) (1)
_____ Motivating (Encouraging Employees in the Department) (2)
_____ Assisting (Filling Voids in the Department) (3)
_____ Managing (Making Decisions in the Department) (4)

Q36 Rank from highest (1) to lowest (5), which department (Feeding, Milling, Yard Maintenance, Cattle, General Administration) is the most stressful to manage?

_____ Feeding (1)
_____ Milling (2)
_____ Yard Maintenance (3)
_____ Cattle (4)
_____ General Administration (5)

Q77 Do you feel as though the image associated with feedyard labor is a deterrent to potential applicants?

	Very much so (11)	Somewhat (12)	Neutral (13)	Less likely (14)	Not at all (15)
1 (1)	○	○	○	○	○

Page Break

Q17 Do you have a formal training process for new employees?

- ○ Yes (1)
- ○ No (2)

Q18 If a new employee has feedyard experience does he/she go through a different training process than an employee with no prior feedyard experience?

- ○ Yes (1)
- ○ No (2)

Q19 How many days is the average training process for new employees?

	Inexperienced Employees				Experienced Employees			
	less than 30 days (1)	between 30 and 90 days (2)	between 90 and 180 days (3)	greater than 180 days (4)	less than 30 days (1)	between 30 and 90 days (2)	between 90 and 180 days (3)	greater than 180 days (4)
Average number of days allotted for training process (1)	○	○	○	○	○	○	○	○

Q37 What methods do you use to recruit new employees? (select all that apply)

- ☐ Career Fairs (1) (1)
- ☐ Radio (2) (2)
- ☐ Television (3) (3)
- ☐ Newspaper (4) (4)
- ☐ Social Media (5) (5)
- ☐ Word of Mouth (6) (6)
- ☐ Other (7) (7) _____

Q39 Do you recruit employees from local high schools?

- ○ Yes (1)
- ○ No (2)

Q38 What percentage of employees do you promote from within?

	0 10 20 30 40 50 60 70 80 90 100
Percentage of employees promoted from within: ()	

Q46 Do you try to hire from within before out-sourcing?

- ○ Yes (1)
- ○ No (2)

Q40 Have you ever hired any employees from the TCFA Feedyard Technician Program?

- ○ Yes (1)
- ○ No (2)

Skip To: Q49 If Have you ever hired any employees from the TCFA Feedyard Technician Program? = No

---

Q41 Is this employee still employed with your feedyard?

- ○ Yes (1)
- ○ No (2)

Q49 Do you offer internships for students?

- ○ Yes (1)
- ○ No (2)

Q65 If yes, have you successfully recruited full-time employees from the internship program?

- ○ Yes (1)
- ○ No (2)

Q66 If so, how many?

	0 1 2 3 4 5 6 7 8 9 10
Number of employees hired from internships ()	

Q50 Who/What is your biggest competitor for employees?

- ☐ Other Feedyards (1) (1)
- ☐ Dairies (2) (2)
- ☐ Farming Operations (3) (3)
- ☐ Ranching Operations (4) (4)
- ☐ Packing Houses (5) (5)
- ☐ Processing Facilities (6) (6)
- ☐ Oil and Gas Companies (7) (7)
- ☐ Truck Driving Companies (8) (8)
- ☐ Other Agriculture Related Competitors (9) (9)
- ☐ Other Non-Agriculture Related Competitors (10) (10)
- ☐ Other (11) (11) _____

Q51 Who/What do you lose current employees to?

- ☐ Seasonal Labor (Wheat Pasture, Calving Season, etc.) (1) (1)
- ☐ Return to Education (2) (2)
- ☐ Change of Industry (3) (3)
- ☐ Economic Reasons (4) (4)
- ☐ Other Feedyards (5) (5)
- ☐ Non-Agriculture Companies (6) (6)
- ☐ Other (7) (7) _____

Q16 Out of the characteristics given, what are the top four key characteristics you look for when hiring new employees?

Specifically want in a potential employee.
_____ Experience (1) (1)
_____ Trustworthiness (2) (2)
_____ Bilingual (3) (3)
_____ Punctual (4) (4)
_____ Prideful (5) (5)
_____ Humble (6) (6)
_____ Responsible (7) (7)
_____ Confidence (8) (8)
_____ Teachable (9) (9)
_____ Dependable (10) (10)
_____ Other (11) (11)

Q48 If the opportunity arose, would your replace employees with technology?

- ○ Yes (1)
- ○ No (2)

Page Break

Q71 Please tell us in your own opinion how TCFA member feedyards can improve recruitment and retention of feedyard employees.

_____

_____

_____

_____

_____

Q72 If interested in entering in the raffle for the custom cowhide cut out prize in response for completing this survey, please enter in your email address below.

_____

End of Block: Default Question Block

Labor Survey Material

TEXAS CATTLE FEEDERS ASSOCIATION

2019 Texas Cattle Feeders
Human Resource Assessment

Dear «Manager»,

On behalf of Texas Cattle Feeders Association, in conjunction with West Texas A&M University, we are requesting your assistance with a research project addressing labor in the cattle feeding industry. The purpose of this research is to better understand the motivations, thoughts, and feelings of employees currently working in the industry.

Instructions

In this box you will find individual sealed envelopes which contain the following:

- Survey instructions (English & Spanish),
- Survey (English & Spanish),
- Cotton gloves (as a token of our sincere appreciation), and
- A business reply envelope – postage paid.

Please **do not** open the enclosed envelopes, these are for you to disburse to selected employees at your feedyard.

1. **Randomly** select a minimum of one employee from each department. Below are a couple of examples.
   - If you received five survey packets and have five departments, distribute one packet per department (Mill, Feed, Cattle, Yard, and General Administration) to randomly selected employees.
   - If you received more survey packets than departments in your yard, distribute remaining packets to randomly selected employees from any area of the yard.
   - If you received fewer surveys than departments, distribute one packet per randomly selected department. For example, select two different areas of the yard if you have two surveys.

2. Distribute each envelope to the selected employees to complete. Instruct the employee to complete survey and seal their response in the business reply envelope. Remind them that the postage is paid and they simply need to drop it in a mailbox. We ask that the employees have the option to place their envelope in the outgoing feedyard mail, however this is at your discretion.

3. Lastly, please remind them that it is **completely confidential and anonymous.**

It is vital for your employees to know that responses are completely anonymous and confidential. This project is striving to understand the characteristics which draw these employees to their position in the feedyard industry. Please assure the employees that you will not have access to their responses.

This research has been approved by the Institutional Review Board at West Texas A&M University. If you have any concerns about this study or your rights, you can contact the dean of the graduate school and research at 806.651.2730. If you have any questions please feel free to contact Dr. Mallory Vestal at 806.651.2718 or Garrett Robinson (Graduate Research Assistant) at 806.681.0265.

Thank you very much for helping with this important study.

Sincerely,
Dr. Mallory K. Vestal, West Texas A&M University
Dr. Bridget L. Guerrero, West Texas A&M University
Dr. Ty E. Lawrence, West Texas A&M University
Garrett D. Robinson, West Texas A&M University

TEXAS CATTLE FEEDERS ASSOCIATION

2019 Texas Cattle Feeders Human Resource Assessment

[Date]

Dear Participant,

On behalf of Texas Cattle Feeders Association, in conjunction with West Texas A&M University, we are requesting your help with a research study on evaluating the challenges you, as a feedyard employee, face in your occupation. The purpose of this research is to better understand your thoughts, feelings, and attitudes toward your employment. This letter serves as an invitation for your participation, and is completely voluntary. Refusal to participate does not affect any benefits to which you are otherwise entitled.

In participating, you will assist us in our research regarding labor retention and recruitment challenges within the cattle feeding industry. The survey should take about 5 – 10 minutes of your time, and is completely voluntary. If you choose to participate in this project, please answer all questions as honestly as possible. Again, participation is strictly voluntary, and you may refuse to participate at any time.

Your responses herein will remain **completely confidential**, and your assistance is greatly appreciated.

Once you have completed the survey, please return it in the envelope provided and seal the envelope. No postage is required. You may either mail it yourself or give it to the main office & they will mail it on your behalf.

This research has been approved by the Institutional Review Board at West Texas A&M University. If you have any concerns about this study or your rights, you can contact the dean of the graduate school and research at 806.651.2730. Should you have any questions and/or wish to review summary findings please contact us at 806.651.2718.

Thank you very much for helping with this important study.

Sincerely,

Dr. Mallory K. Vestal, West Texas A&M University
Dr. Bridget L. Guerrero, West Texas A&M University
Dr. Ty Lawrence, West Texas A&M University
Garrett D. Robinson, West Texas A&M University

TEXAS CATTLE FEEDERS ASSOCIATION

2019 Texas Cattle Feeders Human Resource Assessment

WT

Section 1: Background

The following section is designed to give the feedyard industry a better understanding of what the backgrounds are of laborers in our local feedyards.

1. What is the zip code of the feedyard that you are currently employed at? ☐

2. What is your age? ☐ 2a. What is your gender? ☐ Male ☐ Female

3. What is your primary ethnicity? (Please check all that apply)
☐ White ☐ Hispanic or Latino ☐ Black or African American
☐ Native American or American Indian ☐ Asian / Pacific Islander ☐ Other_____

4. What is the highest level of education you have completed? (Please check one)
☐ Did not complete high school ☐ High school graduate ☐ Some college ☐ 2 year degree ☐ 4 year degree ☐ Professional degree (i.e. PhD, MD, JD)_____

5. How many years have you worked in the feedyard industry? ☐

6. How many years have you worked at your current feedyard? ☐

7. What department do you currently work in? (Please check one)
☐ Office Staff ☐ Cattle Department ☐ Feed Department ☐ Mill Department ☐ Yard Department

8. What other industries have you worked in? (Please check all that apply)
☐ Farming ☐ Dairy ☐ Slaughter ☐ Trucking ☐ Other_____

9. Do you plan to work at your current feedyard until retirement? (Please check one) ☐ Yes ☐ No ☐ Maybe

10. How did you learn about the opening for your position? (Check one, or please explain)
☐ Career Fair ☐ Radio ☐ Television ☐ Other_____
☐ Newspaper ☐ Social Media ☐ Word of Mouth _____

11. Were you seeking benefits when you applied for your current position? (Please check one) ☐ Yes ☐ No ☐ Maybe

12. Which benefits are you currently enrolled in?
☐ Health Insurance ☐ Dental Insurance ☐ Retirement/401k ☐ Other_____

13. What other characteristics were you seeking when you applied for your position?

_____

Section 2: Satisfaction

The following section is designed to give the cattle feeding industry a better understanding of how well laborers in the feedyard industry are satisfied with their job.

14. Do you feel as if your expectations for your job have been thoroughly met? ☐ Yes ☐ No ☐ Maybe

15. How satisfied are you with your current position? (Check what represents you most accurately)

☐Extremely Satisfied	☐Moderately Satisfied	☐Slightly Satisfied	☐Neutral	☐Slightly Dissatisfied	☐Moderately Dissatisfied	☐Extremely Dissatisfied

16. How satisfied are you with your coworkers? (Check what represents you most accurately)

☐Extremely Satisfied	☐Moderately Satisfied	☐Slightly Satisfied	☐Neutral	☐Slightly Dissatisfied	☐Moderately Dissatisfied	☐Extremely Dissatisfied

17. How satisfied are you with the investment that your company makes in your training and education?

☐Extremely Satisfied	☐Moderately Satisfied	☐Slightly Satisfied	☐Neutral	☐Slightly Dissatisfied	☐Moderately Dissatisfied	☐Extremely Dissatisfied

18. Please tell us what the most *satisfying* part of your employment is.

19. Please tell us what the most *unsatisfying* part of your employment is.

Section 3: Work Life

The following section is designed to give us, the researchers, a better understanding of how you feel about your employment and receive feedback on your opinions towards possible opportunities.

20. How many hours do you work in the average week? (Please check one)
□ 0-10 □ 11-20 □ 21-30 □ 31-40 □ 41-50 □ 51-60 □ 61-70 □ 71+

21. If you were allowed to set your own hours, how many would you set for yourself every week?
□ 0-10 □ 11-20 □ 21-30 □ 31-40 □ 41-50 □ 51-60 □ 61-70 □ 71+

22. How much, and how often do you receive on the job training?
□ None □ Once time a month □ Two times a month □ Three times a month □ N/A

23. Do you feel like there is room for advancement in your employment? □ Yes □ No □ Unsure

24. Would you be willing to take a promotion? □ Yes □ No □ Unsure

25. Would you encourage your children to work in the feedyard industry? □ Yes □ No □ Unsure
25a. Please tell us *why or why not*?

26. What motivates you to continue to come back to your job each day?

27. What would you like to see changed about your employment?

28. What incentive(s)/benefit(s) would attract more of your friends/acquaintances to work in the feedyard industry?

29. What tends to make your fellow employees leave your place of employment?

30. What types of practices/benefits/management styles could your employer offer to reduce employee turnover?

TEXAS CATTLE FEEDERS ASSOCIATION

We sincerely thank you for taking the time to complete this survey.

WT

MKV20191GDR

TEXAS CATTLE FEEDERS ASSOCIATION

Evaluación de Recursos Humanos de la Asociación de Alimentadores de Ganado de Texas del 2019

WT

Sección 1: Antecedentes

La siguiente sección está diseñada para dar a la industria de la alimentación de ganado una mejor comprensión de los antecedentes de los trabajadores en centros de alimentación de ganado locales.

1. ¿Cual es el código postal del centro de alimentación de ganado donde usted trabaja? ☐

2. ¿Cual es su edad? ☐ 2a. ¿Cual es su genero? ☐ Masculino ☐ Femenino

3. ¿Cual es su etnicidad? (Marque todos los que apliquen)
☐ Blanco(a) ☐ Hispano o Latino ☐ Negro o Afro Americano
☐ Nativo Americano o Indio Americano ☐ Asiatico / Isleño Pacífico ☐ Otro_____

4. ¿Cuál es el nivel más alto de educación que ha completado? (Por favor marque uno)
☐ No complete la preparatoria ☐ Complete la preparatoria ☐ Algo de universidad ☐ Título de 2 años ☐ Título de 4 años ☐ Título Profesional (i.e. PhD, MD, JD) _____

5. ¿Cuantos años ha trabajado en la industria de alimentación de ganado? ☐

6. ¿Cuantos años ha trabajado en el centro de alimentación de ganado donde trabaja actualmente? ☐

7. ¿En que departamento trabaja actualmente? (Marque uno)
☐ Personal de oficina ☐ Departamento de ganado ☐ Departamento de alimentación ☐ Departamento de molinos ☐ Departamento de lote

8. ¿En que industrias ha trabajado? (Marque todos los que apliquen)
☐ Agricultura ☐ Lechería ☐ Matanza ☐ Camionaje ☐ Otro_____

9. ¿Planea trabajar en el centro de alimentación de ganado actual hasta la jubilación? (Marque uno) ☐ Si ☐ No ☐ Tal Vez

10. ¿Cómo aprendió sobre la apertura para su posición? (Marque uno, o explique)
☐ Feria de carreras ☐ Radio ☐ Televisión ☐ Otro_____
☐ Periódico ☐ Medios de Comunicación Social ☐ Boca a Boca _____

11. ¿Estaba buscando beneficios cuando solicitó su puesto actual? (Marque uno) ☐ Si ☐ No ☐ Tal Vez

12. ¿En qué beneficios está actualmente inscrito?
☐ Seguro de salud ☐ Seguro dental ☐ Jubilación/401k ☐ Otro_____

13. ¿Qué otras características buscaba cuando solicitó su puesto?

_____

Sección 2: Satisfacción

La siguiente sección está diseñada para dar a la industria de alimentación de ganado una mejor comprensión de el nivel de satisfacción de los trabajadores en la industria con su trabajo.

14. ¿Siente que sus expectativas de trabajo se han cumplido totalmente? ☐ Si ☐ No ☐ Tal Vez

15. ¿Qué tan satisfecho está con su posición actual? (Marque la opción que lo representa con mayor precisión)
☐ Muy Satisfecho ☐ Moderadamente satisfecho ☐ Un poco satisfecho ☐Neutral ☐ Un poco insatisfecho ☐ Moderadamente insatisfecho ☐ Muy insatisfecho

16. ¿Qué tan satisfecho está usted con sus compañeros de trabajo? (Marque la opción que lo representa con mayor precisión)
☐ Muy Satisfecho ☐ Moderadamente satisfecho ☐ Un poco satisfecho ☐Neutral ☐ Un poco insatisfecho ☐ Moderadamente insatisfecho ☐ Muy insatisfecho

17. ¿Qué tan satisfecho está con la inversión que su empresa realiza en su capacitación y educación?
☐ Muy Satisfecho ☐ Moderadamente satisfecho ☐ Un poco satisfecho ☐Neutral ☐ Un poco insatisfecho ☐ Moderadamente insatisfecho ☐ Muy insatisfecho

18. Díganos cuál es la parte más satisfactoria de su empleo.

_____

_____

19. Por favor díganos cuál es la parte más **insatisfactoria** de su empleo.

_____

_____

Sección 3: Vida Laboral

La siguiente sección está diseñada para brindarnos, a los investigadores, una mejor comprensión de cómo se siente con respecto a su empleo y recibir comentarios sobre sus opiniones sobre posibles oportunidades.

20. ¿Cuántas horas trabaja por semana? (Marque uno)
□ 0-10 □ 11-20 □ 21-30 □ 31-40 □ 41-50 □ 51-60 □ 61-70 □ 71+

21. ¿Si se le permitiera establecer sus propios horarios, ¿cuántos establecería usted mismo cada semana?
□ 0-10 □ 11-20 □ 21-30 □ 31-40 □ 41-50 □ 51-60 □ 61-70 □ 71+

22. ¿Cuánto y con qué frecuencia recibe capacitación en el trabajo?
□ Ninguna □ Una vez al mes □ Dos veces al mes □ Tres veces al mes □ N/A

23. ¿Sientes que hay espacio para avanzar en tu empleo? □ Si □ No □ Tal Vez

24. ¿Estarías dispuesto a tomar una promoción? □ Si □ No □ No Se

25. ¿Animarías a tus hijos a trabajar en la industria de alimentación de ganado? □ Si □ No □ No Se

25a. Por favor dinos por qué o por qué no

_____

_____

26. ¿Que lo motiva a continuar regresando a tu trabajo cada día?

_____

_____

_____

27. ¿Qué le gustaría cambiar acerca de su empleo?

_____

_____

_____

28. ¿Qué incentivo(s)/beneficio(s) atraerían a más amigos / conocidos para trabajar en la industria de la alimentación de ganado?

_____

_____

_____

29. ¿Qué hace que sus compañeros de trabajo dejen su lugar de trabajo?

_____

_____

_____

30. ¿Qué tipos de prácticas / beneficios podría ofrecer su empleador para evitar que los empleados se vayan?

_____

_____

_____

TEXAS CATTLE FEEDERS ASSOCIATION

Gracias por su participación

WT

WTTFCA10001

Appendix B

Labor Survey Data

Table B-1. Response Type (English vs. Spanish)

English	118
	(77.63)
Spanish	34
	(22.37)

top number=frequency, and bottom number=percentage distribution.

Table B-2. Question 2-Gender

Male	119
	(80.95)
Female	28
	(19.05)

top number=frequency, and bottom number=percentage distribution.

Table B-3. Question 3-Ethnicity

Black or African American	1
	(0.66)
Hispanic or Latino	75
	(49.34)
Native American or American Indian	1
	(0.66)
White	74
	(48.68)

top number=frequency, and bottom number=percentage distribution.

Table B-4. Question 4-Education

Did not complete high school	28
	(19.05)
High school graduate	45
	(30.61)
Some college	33
	(22.45)
2 year degree	13
	(8.84)
4 year degree	23
	(15.65)
Professional degree	5
	(3.40)

top number=frequency, and bottom number=percentage distribution.

Table B-5. Question 7-Departments

Cattle Department	47
	(31.54)
Feed Department	32
	(21.48)
Mill Department	17
	(11.41)
Yard Department	19
	(12.75)
Office Staff/General Admin.	34
	(22.82)

top number=frequency, and bottom number=percentage distribution.

Table B-6. Question 10-Recruitment Methods

Newspaper	8
	(5.33)
Radio	1
	(0.67)
Social Media	3
	(2.00)
Word of Mouth	113
	(75.33)
Other	24
	(16.00)

top number=frequency, and bottom number=percentage distribution.

Table B-7. Questions 9,11,14,23,24, and 25-Nominal Questions

	Yes	No	Maybe/Unsure
Q9: Do you plan to work at your current feedyard until retirement?	69 (46.62)	16 (10.81)	63 (42.57)
Q11: Were you seeking benefits when you applied for your current position?	84 (55.26)	58 (38.16)	10 (6.58)
Q14: Do you feel as if your expectations for your job have been thoroughly met?	107 (72.79)	16 (10.88)	24 (16.33)
Q23: Do you feel like there is room for advancement in your employment?	83 (56.08)	40 (27.03)	25 (16.89)
Q24: Would you be willing to take a promotion?	109 (72.67)	13 (8.67)	28 (18.67)
Q25: Would you encourage your children to work in the feedyard industry?	71 (47.65)	44 (29.53)	34 (22.82)

top number=frequency, and bottom number=percentage distribution.

Table B-8. Questions 20, 21, & 22-
Work Life Frequencies

	0-10	11-20	21-30	31-40	41-50	51-60	61-70	71+
Q20: How many hours do you work in the average week?	3	3	0	9	28	60	36	13
	(1.97)	(1.97)	(0.00)	(5.92)	(18.42)	(39.47)	(23.68)	(8.55)
	0-10	11-20	21-30	31-40	41-50	51-60	61-70	71+
Q21: If you were allowed to set your own hours, how many would you set for yourself every week?	3	2	3	17	47	46	23	4
	(2.07)	(1.38)	(2.07)	(11.72)	(32.41)	(31.72)	(15.86)	(2.76)

	Not at all	Once a month	Twice a month	Three times a month
Q22: How much, and how often do you receive on the job training?	34	58	11	7
	(30.91)	(52.73)	(10.00)	(6.36)

top number=frequency, and bottom number=percentage distribution.

Table B-9. Questions 15, 16, & 17-
Employee Satisfaction

	1	2	3	4	5	6	7
Q15: How satisfied are you with your current position?							
	63	59	10	13	3	2	0
	(42.00)	(39.33)	(6.67)	(8.67)	(2.00)	(1.33)	(0.00)
Q16: How satisfied are you with you coworkers?							
	57	60	15	10	6	0	2
	(38.00)	(40.00)	(10.00)	(6.67)	(4.00)	(0.00)	(1.33)
Q17: How satisfied are you with the investment that your company makes in you training and education?							
	49	50	18	22	4	4	4
	(32.45)	(33.11)	(11.92)	(14.57)	(2.65)	(2.65)	(2.65)

top number=frequency, and bottom number=percentage distribution.
measured on a likert scale, 1-7, where 1=Extremely Satisfied, 7-Extremely Dissatisfied.

Table B-10. Group Frequencies by Department

	Group 1	Group 2	Group 3
Cattle Dept.	17	19	11
	(36.96)	(37.25)	(21.57)
Feed Dept.	9	10	12
	(19.57)	(19.61)	(23.52)
Mill Dept.	5	5	7
	(10.87)	(9.80)	(13.73)
Office Dept./General Administration	10	14	10
	(21.74)	(27.45)	(19.61)
Yard Dept.	5	3	11
	(10.87)	(5.88)	(21.57)

[1]top number=frequency, and bottom number=percentage distribution.

[2]Group Number - 1=<28,000 head, 2=28,001-59,999 head, 3=>60,000 head.

Table B-11-1. Means

	Total Responses	English	Spanish	Group 1	Group 2	Group 3
Q2. What is your age?						
	42.2	40.6	47.6	45.1	41.4	39.9
	(14.63)	(14.71)	(13.10)	(13.87)	(14.07)	(15.65)
Q5. How many years have you worked in the feedyard industry?						
	14.8	13.7	18.6	17.2	15.0	11.9
	(12.45)	(12.34)	(12.23)	(12.61)	(12.82)	(11.23)
Q6. How many years have you worked at your current feedyard?						
	9.8	8.6	13.8	11.0	8.9	8.9
	(10.49)	(9.83)	(11.85)	(10.92)	(9.90)	(10.04)
Feedyard Capacity						
	44,453	46,809	36,030	20,357	41,705	70,353
	(22,197)	(22,133)	(20,614)	(5,244)	(8,188)	(11,128)

top number=mean, and bottom number=standard deviation.

Table B-11-2. Means

	Cattle	Feed	Mill	Yard	GA
Q2. What is your age?					
	40.6	40.9	41.7	43.5	44.2
	(14.30)	(14.97)	(13.10)	(18.05)	(13.25)
Q5. How many years have you worked in the feedyard industry?					
	16.6	14.3	16.2	11.8	12.7
	(13.79)	(12.26)	(11.50)	(10.65)	(11.86)
Q6. How many years have you worked at your current feedyard?					
	7.9	9.8	13.5	10.7	9.2
	(9.72)	(11.21)	(10.24)	(10.54)	(10.26)
Feedyard Capacity					
	39,787	48,871	49,529	47,421	44,750
	(20,674)	(24,369)	(20,445)	(22,416)	(22,490)

top number=mean, and bottom number=standard deviation.

Manager Survey Data

Table B-12. Means, Manager Survey Questions

	Mean	Std Dev
Q2. What is the capacity of the feedyard you manage?	38.60	(12.23)
Q5. How many years have you managed a feedyard?	16.60	(11.28)
Q6. How many years have you managed your current feedyard?	10.33	(09.38)
Q7. How many years have you been in a management role in any aspect of the feedyard?	21.72	(09.70)
Q8. On the average day, how many hours are you working on feedyard business?	10.20	(02.08)
Q9. On a one-way commute, in miles, how far do you travel to your feedyard?	17.88	(16.09)
Q20. What is the average age of your employees by department?		
General Administration	44.24	(09.45)
Mill Dept.	38.78	(08.91)
Feed Dept.	38.48	(07.34)
Cattle Dept.	37.16	(07.74)
Yard Dept.	41.08	(10.11)
Q21. How many one-on-one meetings do you have with department managers every month?	3.83	(02.79)
Q22. How many one-on-one meetings do you have with department laborers every month?	2.26	(01.89)
Q26. On average, what is the percentage of your employees who enroll family members in health insurance benefits?	48.70	(33.29)
Q27. What is the percentage of your employees that enroll in retirement plan benefits?	45.69	(29.96)
Q29. What percentage of your employees participate in incentive programs?	56.86	(46.92)
Q31. On average, what is the annual percentage of the turnover for each department?		
General Administration	6.23	(09.92)
Mill Dept.	16.47	(14.61)
Feed Dept.	20.35	(14.98)
Cattle Dept.	28.50	(20.91)
Yard Dept.	22.60	(17.47)
Q38. What percentage of employees do you promote from within?	46.60	(31.86)
Q61. What is the average number of laborers you employ by department?		
General Administration	3.42	(01.44)
Mill Dept.	4.09	(02.33)
Feed Dept.	4.56	(02.12)
Cattle Dept.	8.12	(04.70)
Yard Dept.	5.25	(02.85)
Q62. What percentage of your labor force are natural born U.S. citizens, by department?		
General Administration	95.83	(20.01)
Mill Dept.	46.74	(38.28)
Feed Dept.	49.50	(34.60)
Cattle Dept.	58.72	(29.07)
Yard Dept.	48.63	(32.48)

Table B-13. Q52. What tasks do you out-source to reduce your need for on-site labor?

	Frequency	Percentage
Tank Washing (1)	0	0%
Farming (2)	10	77%
Processing (3)	4	31%
Sorting (4)	0	0%
Loading (5)	1	8%
Lagoon Service (6)	3	23%
Mill Service (7)	6	46%
Maintenance on Equipment (8)	1	8%
Feed Mill Operations (9)	0	0%
Cattle Procurement (10)	1	8%
Fat Cattle Marketing (11)	1	8%
Silage Packing (12)	10	77%
High Moisture Corn Grinding/Packaging (13)	0	0%
Environmental Compliance (14)	8	62%
Nutritionist Consultation (15)	11	85%
Veterinarian Consultation (16)	9	69%
Other (17)	0	0%

Question was worded as check all that apply.

Table B-14. Q51. What are the reasons you became a feedyard manager? (select all that apply)

	Frequency	Percentage
Passion for cattle feeding (1)	18	62%
Family heritage (2)	7	24%
Work environment (3)	8	28%
Salary (4)	8	28%
Location of employment (5)	10	34%
Coworkers (6)	8	28%
General desire to be in the agriculture industry (7)	18	62%
Other (8)	2	7%

Question was worded as check all that apply.

Table B-15. Q25. Please select the following benefits/incentives your feedyard offers its employees:

	Frequency	Percentage
Auto (1)	8	32%
Housing (2)	4	16%
Cell Phone (3)	7	28%
Health Insurance (4)	21	84%
Life Insurance (5)	17	68%
Disability Insurance (6)	12	48%
Retirement Plan (7)	15	60%
Profit-Sharing (8)	5	20%
Stock Options in Company (9)	1	4%
Safety Incentive Programs (10)	6	24%
Other (11)	3	12%

Question was worded as check all that apply.

Table B-16. Q63. How do your employees earn time off?

	Frequency	Percentage
Based on length of service (1)	18	72%
Set number of days (2)	5	20%
Donating hours between employees (3)	0	0%
No time off plan (4)	2	8%
Other (5)	2	8%

Question was worded as check all that apply.

Table B-17. Q37. What methods do you use to recruit new employees? (select all that apply)

	Frequency	Percentage
Career Fairs (1)	5	20%
Radio (2)	4	16%
Television (3)	0	0%
Newspaper (4)	14	56%
Social Media (5)	12	48%
Word of Mouth (6)	25	100%
Other (7)	0	0%

Question was worded as check all that apply.

Table B-18. Q50. Who/What is your biggest competitor for employees?

	Frequency	Percentage
Other Feedyards (1)	17	68%
Dairies (2)	8	32%
Farming Operations (3)	5	20%
Ranching Operations (4)	4	16%
Packing Houses (5)	5	20%
Processing Facilities (6)	0	0%
Oil and Gas Companies (7)	11	44%
Truck Driving Companies (8)	6	24%
Other Agriculture Related Competitors (9)	4	16%
Other Non-Agriculture Related Competitors (10)	1	4%

Question was worded as check all that apply.

Table B-19. Q51-1.Who/What do you lose current employees to?

	Frequency	Percentage
Seasonal Labor (Wheat Pasture, Calving Season, etc.) (1)	5	20%
Return to Education (2)	2	8%
Change of Industry (3)	6	24%
Economic Reasons (4)	8	32%
Other Feedyards (5)	13	52%
Non-Agriculture Companies (6)	6	24%
Other (7)	1	4%

Question was worded as check all that apply.

Table B-20. Q16. Please select the following benefits/incentives your feedyard offers its employees:

	Frequency	Percentage
Experience (1)	7	44%
Trustworthiness (2)	14	88%
Bilingual (3)	0	0%
Punctual (4)	3	19%
Prideful (5)	0	0%
Humble (6)	4	25%
Responsible (7)	9	56%
Confidence (8)	0	0%
Teachable (9)	12	75%
Dependable (10)	15	94%
Other (11)	0	0%

Question was worded as check all that apply.

Table B-21. Q47. What is the highest level of education that you have completed?

	Frequency	Percentage
Did not complete high school	2	4%
High school graduate	1	8%
Some college	5	20%
Two-year degree	1	4%
Four-year degree	12	48%
Professional degree	3	12%
Doctorate	1	4%

Table B-22. Q23. On a scale, how satisfied are you with your job?

	Frequency	Percentage
Extremely Satisfied	13	52%
Moderately Satisfied	10	40%
Slightly Satisfied	2	8%
Neutral	0	0%
Slightly Dissatisfied	0	0%
Moderately Dissatisfied	0	0%
Extremely Dissatisfied	0	0%

Table B-23. Q24. Please respond true or false on the following statements

	Frequency		Percentage	
	TRUE	FALSE	TRUE	FALSE
I feel as if I am respected by my employees	24	1	96%	4%
I feel as if my employees enjoy me	24	1	96%	4%
I feel like there are areas where I can improve	24	1	96%	4%

Table B-24. Q28. On a scale from 1 to 9, how much stress is associated with being a manager?

	Frequency	Percentage
1	0	0%
2	0	0%
3	1	40%
4	1	40%
5	0	0%
6	5	20%
7	12	48%
8	6	24%
9	0	0%

measured on a likert scale, 1-9, where 1=No Stress, 9-Excessive Stress

Table B-25. Q13. On a scale from 1 to 5 how well do you know your employees?

	Extremely Well		Somewhat Well		Neutral		Somewhat Poor		Extremely Poor	
Overall	5	20%	15	60%	4	16%	0	0%	1	4%
Personality	8	32%	14	56%	3	12%	0	0%	0	0%
Strengths	13	52%	11	44%	1	4%	0	0%	0	0%
Weaknesses	15	60%	9	36%	1	4%	0	0%	0	0%

Table B-26. Q52. Which answer best describes your family background?

	Frequency	Percentage
Urban	3	12%
Farm/Ranch	16	64%
Cattle Feeding	4	16%
Dairy	1	40%
Hogs	0	0%
Other	1	40%

Table B-27. Nominal Questions

		Frequency	Percentage
Q11. Do you utilize the E-Verify program?			
	Yes	13	52%
	No	12	48%
Q64. Do the employees use their earned time off?			
	Yes	23	96%
	No	1	42%
Q17. Do you have a formal training process for new employees?			
	Yes	11	44%
	No	14	56%
Q18. If a new employee has feedyard experience does he/she go through a different training process than an employee with no prior feedyard experience?			
	Yes	11	44%
	No	14	56%
Q39. Do you recruit from local high schools?			
	Yes	5	20%
	No	20	80%
Q46. Do you try to hire from within before out-sourcing?			
	Yes	23	100%
	No	0	0%
Q40. Have you ever hired any employees from the TCFA Feedyard Technician Program?			
	Yes	24	96%
	No	1	4%
Q49. Do you offer internships to students?			
	Yes	14	58%
	No	10	42%
Q65. If yes, have you successfully recruited full-time employees from the internship program?			
	Yes	4	22%
	No	14	78%
Q48. If the opportunity arose, would you replace employees with technology?			
	Yes	18	78%
	No	5	22%

Table B-28. Q43. Rank, which methods represent what motivates your employees most effectively:

	Frequency	Percentage
Intrinsic Motivation (Fun)	4	17%
Instrumental Motivation (Monetary)	9	39%
Self-Concept External Motivation (Praise and Recognition)	3	13%
Self-Concept Intrinsic Motivation (Challenging Skills)	2	9%
Goal Internalization (Principles)	5	22%

Table B-29. Q19. How many days is the average training process for new employees?

Inexperienced Employees	Frequency	Percentage
less than 30 days	17	68%
between 30 and 90 days	7	28%
between 90 and 180 days	0	0%
greater than 180 days	1	4%
Experienced Employees		
less than 30 days	15	88%
between 30 and 90 days	1	59%
between 90 and 180 days	1	59%
greater than 180 days	0	0%

Appendix C

Figure 1 Q18: Please tell us what the most *satisfying* part of your employment is.

Figure 2 Q19: Please tell us what the most *unsatisfying* part of your employment is.