Eyes in the field, a seat at the table, a voice at the ranch: a study on optimal farm labor conditions.

Christine Wiggins-Romesburg

University of Louisville

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EYES IN THE FIELD, A SEAT AT THE TABLE, A VOICE AT THE RANCH: 
A STUDY ON OPTIMAL FARM LABOR CONDITIONS

By
Christine Ashley Wiggins-Romesburg
B.S., Clemson University, 2002
M.S., University of Louisville, 2011

A Dissertation
Submitted to the Faculty of the
College of Education and Human Development of the University of Louisville
In Partial Fulfillment of the Requirements
For the Degree of

Doctor of Philosophy
In Educational Leadership and Organizational Development

Department of Educational Leadership, Evaluation and Organizational Development
University of Louisville
Louisville, Kentucky

May 2019
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A Dissertation Approved on

April 2, 2019

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Dr. Dale Billingsley

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Dr. Rod Githens

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Dr. Ann Herd

________________________________
Dr. Ellen Scully-Russ
DEDICATION

This dissertation is dedicated to my great-grandfather, Hugh Francis Kennedy, who immigrated to the United States from Ireland as an agriculture worker in 1905,

and

Dr. Christine Blasey-Ford, whose courage and bravery inspired me to keep writing at times when I didn’t think I could, and it made all the difference.
ABSTRACT

EYES IN THE FIELD, A SEAT AT THE TABLE, A VOICE AT THE RANCH:
A STUDY ON OPTIMAL FARM LABOR CONDITIONS

Christine Ashley Wiggins-Romesburg

April 2, 2019

The field of human resource development has twin obligations to promote the performance of organizations and the satisfaction and welfare of all workers. Nevertheless, agriculture appears to be an understudied industry in the field, despite this obligation and the potential for suffering experienced by workers performing crop work. This case study sought to understand the process through which a single agricultural operation fosters optimal conditions for workers engaged in labor-intensive crop production. This study found employees experienced better treatment compared to other agricultural operations, and that conditions were rich in both intrinsic and extrinsic factors. Intrinsic factors were marked by (a) the recognition employees receive from customers and a vendor; (b) sense of achievement from high rates of production and being treated and respected as professionals; (c) opportunities for advancement that are fair and based on merit; (d) an abundance of growth and development opportunities,
including communication and problem solving skills; (e) responsibility workers have to improve the workplace and share in decision making, and (f) a sense of freedom from oppressive working conditions. Extrinsic factors were marked by: (a) high/low earning potential and potential work interruptions; (b) employer actively striving to offer more year-around employment to core employees; (c) trained and fair managers; (d) amicable and respectful interpersonal relations at all levels; (e) fair company policies and administration; (f) working conditions that promote employee health and welfare; (g) quality of personal life that is diminished by low hours and potential for back pain; and (h) employer is supportive of families.
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CHAPTER I
PICKING PERSPECTIVES

CALIFORNIA – Robust strawberry plants thrive atop trenches combing the vast distance between the mountains and a six-lane highway headed west towards the Pacific. The scent from pristine strawberry fields permeates the crisp morning air. A century-old barn and a few roadside berry and flower stands beckon to simpler, seemingly more idyllic times. Lost in the majestic beauty of the fields and mountainous landscape are the workers who make strawberries possible. They’re there. Just look for their arched backs bobbing just above the plants as they stoop and bend ten-hours-a-day, six-days-a-week picking berries. At one ranch, two men pause to eat lunch while sitting waist-high in strawberry beds. At the next, a crew of 15 pickers pick strawberries along the highway’s edge, flanked by automobiles, but without any restroom or drinking water source in sight. At the third, 14 pickers roll strawberry carts back and forth to a nearby tractor-pulled trailer with a shade roof, folding chairs, drinking water, and portable bathrooms with handwashing basins. On it are signs in Spanish reminding workers that they are empowered to stop work in the event of threats to the health and safety of the workers or the produce, such as an animal in the field or sexual harassment.

In the first ranch, the workers sitting in plant beds instead of chairs greatly increases worker exposure to the pesticide residue on the plants and also exposes the plants to contamination from worker clothing. In the second field, not having nearby access to facilities providing water, a rest area, and restrooms violates California law
which requires such facilities be provided within 200 feet of the crew (California Department of Industrial Relations, 2018). Closer observation of the facilities in the third ranch reveal: an abundant supply of disposable gloves; bathrooms that are cleaned and stocked at least three times a day; cold water that is tested regularly to ensure potability; and trainings and reminders to wash hands before and after using the restroom. A food-safety specialist inspects the clothing and accessories worn by the pickers each day to ensure health and safety. On each crew are workers and crew leaders that have been trained in communication, problem solving, and conflict resolution skills. Furthermore, employees are trained and empowered to speak up and help resolve conditions in the fields affecting workers or food safety.

When pressed with production quotas—which are common in the industry to maintain employment, housing, even to survive—what are workers supposed to do without access to a sink or a restroom, as was observed in the second ranch? Holmes (2013) observed, “Many do not eat or drink anything before work so they do not have to take time to use the bathroom” (p. 73). Even if there is access to a toilet, the likelihood at most ranches is that cleanliness is not maintained, or the toilet may not have toilet paper, and/or the washbasin may not have soap.

Yet, despite these stark differences in health and hygiene conditions between the three ranches observed along the same highway, what they share in common is that all three were engaged in the picking and packing of strawberries directly into transparent clamshells destined for grocery stores—next to be touched by the American consumer. Some were picked by clean hands, washed in clean facilities, and donning latex—other hands perhaps not washed at work at all—with the average American consumer blissfully
unaware that the health and safety of the food we feed our families is inextricably tied to the health and safety of the working conditions where our food is produced.

These differences occur in an industry challenged with dual economic and performance pressures resulting from the rapid expansion and corporatization of agribusiness, aging workforce, declining commodity prices, increased globalization, uncertain immigration reform and enforcement, and declining farm acreage due to urbanization (Holmes, 2013). While these pressures provide abundant incentive for operators to cut corners, what explains the unusual operation that rejects the prevailing approach to minimize labor costs in favor of one that not only complies with all mandates, it develops workers beyond the level necessary to perform their jobs?

Furthermore, what role, if any, can the field of Human Resource Development (HRD) play in improving the performance and productivity of the agricultural industry?

**Human Resource Development Perspectives**

The National Safety Council (2015) found that more workers die in agriculture, per capita, than in any other industry. Workers are exposed to a variety of health risks from sources such as heat stress, pesticide exposure, unsafe transportation, contaminated water, and insufficient or inadequate safety training and equipment. These risks to farm worker health are compounded by housing instability, and economic hardship, high rates of depression and substance abuse, and low levels of worker education and literacy. Notwithstanding these hazards, few studies have been conducted on farm worker safety and illness prevention (Arcury et al., 2012). Agriculture workers are further neglected as a focus of scholarly study (Luna, 1998), including in the field of HRD which has neglected the agricultural industry almost entirely from its purview (Brown, 2013) despite
the field’s stated commitment to the health, safety (McLean, 2004), and welfare of all workers (McLean & McLean, 2001), and the field’s refusal to tolerate “unhealthy human resource practices” (Ruona, 2000, p. 22).

While employee health and safety are infrequent topics of HRD inquiry, they are clearly within the HRD domain which specifies a fundamental commitment to “contribute to human welfare” and to “mitigate the causes of human suffering” (AHRD, 1999). Further, implicit in HRD’s efforts to improve employee performance is a commitment to nurture, respect, and develop workers, and the expectation that employees will not be exploited to meet performance goals (Swanson & Holton, 2009). Mankin (2009) described the twin purposes of HRD as humanist and performance, which are both relevant to study of HRD in the agricultural sector.

**Humanist Perspective**

According to Swanson and Holton (2009), the desire and motivation humans have to learn, and grow is a foundational assumption of HRD. Embedded in this learner-centric perspective is a commitment to employees that is found in many conceptualizations of HRD. According to Ruona (2000), HRD has a “deep and abiding commitment to people… and helping” (p. 557). Sachau (2007) indicated that the purpose of HRD is: “enhancing skills, increasing interest, elevating satisfaction, encouraging ethical behavior, improving performance, and fostering creativity” (p. 378). In France, HRD not only encompasses employee performance, it includes satisfaction and welfare (McLean & McLean, 2001). Others have acknowledged the field’s strong commitment to individual learners that applies at a community or societal level. Harbison and Meyers (1964) defined HRD as “the process of increasing the knowledge, the skills, and the
capacities of all the people in the society” (as cited in Swanson & Holton, 2009, p. 6). McLean and McLean (2001) hold a more global perspective that the potential beneficiaries of HRD are more broadly, individual, group, team, “organization, economy, nation or, ultimately the whole of humanity” (p. 322). At a national level, HRD “goes beyond employment and preparation for employment issues to include health, culture, safety, community and a host of other considerations” (McLean, 2004, p. 269).

Professional duties are established in the Academy of Human Resource Development’s Standards on Ethics and Integrity, which requires that HRD practitioners and scholars minimize harm, protect and contribute to the welfare of others, and “accord appropriate respect to the fundamental rights, dignity, and worth of all people” (AHRD, 1999). Similarly, Ruona (2000) found the field has a “strong commitment to individuals and deep beliefs [about] their goodness and potential,” adding that a core belief in HRD is that professionals should not “tolerate unethical, amoral, or unhealthy human resource practices” (p. 22).

Under the humanist perspective, employment practices that jeopardize employee health, life, and liberty are fundamentally at odds with HRD’s commitment to enhance and develop human potential (Swanson & Holton, 2009). HRD could enhance worker welfare by employing strategies to reduce or end exploitive or abusive labor practices, developing workers for advancement, improving the quality and delivery of employee safety and anti-harassment/discrimination programs, and champion literacy and English programs so workers can read instructions and warning labels and signs and communicate effectively with medical providers. In turn, these activities would likely
improve safety which would lower costs and boost financial performance, as well as reduce absences and turnover.

**Performance Perspective**

Swanson and Holton (2006) described the performance perspective of HRD as “improving the capabilities of individuals working in the system and improving the system in which they perform their work” (p. 149). Gilley, Eggland, and Gilley (2002) described the purpose of HRD similarly as encompassing the enhancement of “knowledge, skills, and competencies for the purpose of improving performance within an organization” (p. 5). This performance perspective is considered most legitimate by the majority of HRD scholars and practitioners who suggest an organization’s resources should only be expended on programs and services that directly contribute to an organization’s betterment (Mankin, 2009), or that enhance financial statements (McGuire, Cross, & O’Donnell, 2005).

While most HRD scholars and practitioners prioritize organizational performance over humanism, or view learning as a process to achieve financial ends, economic pressures should not negate the field’s commitment to worker welfare. Swanson and Holton (2009) stated that implicit in the performance perspective is a commitment to nurture, respect, and develop workers, and an obligation that employees should share in the rewards of improved performance. Furthermore, HRD professionals have an ethical responsibility to ensure employees are not abused to meet performance goals. Regardless of perspective, it seems an understanding that labor-intensive crop production is within HRD’s purview.
Research Purpose and Questions

This study raises the question: what are the reasons one agricultural operator provides relatively exceptional labor conditions when market forces compel the majority of agricultural operators in the same industry to cut corners, labor costs, and break health and labor regulations? Moreover, the processes in which these conditions are fostered, and the implications of optimal conditions for crop workers and agricultural operators, need to be understood. With this in mind, In addition, this study asks:

- What are optimal labor conditions for workers engaged in labor-intensive crop production?
- What are the beliefs and/or perspectives of the agricultural operation that led to the development of optimal conditions?
- What processes or procedures were used to make the conditions optimal?

The minimum selection criteria for an agricultural operation engaged in labor-intensive crop production are compliance with applicable law; amicable grower-labor relations; and a robust worker health and safety program.

Theoretical Framework

The theoretical framework for this study is based on Herzberg (1959; 1966)’s motivation-hygiene theory and enhanced with a change component to illustrate how problem-based and strength-based approaches may be used to create the physical and psychological conditions where employees are highly motivated.

Herzberg’s motivation-hygiene theory examines the relationship between satisfaction and motivation with the physical and psychological needs of crop workers. Herzberg suggested that hygiene factors are the essential physical and safety conditions
that prevent dissatisfaction, and are unrelated to job content (Herzberg, 1968; Sachau, 2007). Motivator factors produce job satisfaction and are psychological, long-term, and intrinsic to the job itself. Herzberg’s motivation-hygiene theory is well-suited as a framework to analyze the working conditions in labor-intensive crop production, as the case selection criteria for this study are indicative of employment inclusive of both hygiene and motivator factors.

The second component of the theoretical framework is problem- and strength-based approaches to change. Problem-solving is a common approach that can be used to eliminate negative conditions producing dissatisfaction with a job; however, problem-solving will not lead to employee motivation alone. To understand the conditions in which crop workers will be motivated and thrive, this framework has been further enhanced with strength-based approaches to change. The first strength-based approach, positive psychology, can be used to cultivate the right conditions for workers to be motivated. The second approach, appreciative inquiry, may be used to discover the positive effects a motivated and thriving workforce has on the health and performance of an agricultural operation. This information can then be provided to community, advocacy, and agricultural organizations as a model for change. A full description of this framework is provided in Chapter II.

**Note About Immigration Status and This Study**

Given the humanist and performance perspectives, the benefits of optimal conditions apply to all agricultural workers and operators, regardless of the immigration status of those employed. Moreover, the agriculture industry’s reliance on undocumented workers—while not a topic of qualitative inquiry in this study—is discussed due to the
potential impact of immigration enforcement and reform on available labor supply. Therefore, immigration status-related topics explored in this manuscript are provided as context, researcher perspective, and study implications (Chapters II, IV, and VI), and do not imply or represent the status of workers or operation discussed in the findings of this study (Chapter V).

**Organization of the Manuscript**

The remainder of this manuscript is organized in four chapters. Chapter II presents literature on conditions affecting farm worker welfare, starting with discussion of the omission of agriculture workers from important labor protections, moving to employment and demographic characteristics of the agriculture labor force, risk factors for poor health, motivational beliefs and attitudes in Mexico, and discussion of the theoretical framework. Chapter III presents the study methodology, including research questions, discussion of qualitative and case study research, data collection and analysis techniques, ethical consideration, and concludes with a discussion of researcher positionality. Chapter IV presents the findings of the study, including a discussion of conditions on other ranches, motivation and hygiene conditions, and concludes with a discussion of the influence these factors have on employee satisfaction. Chapter V provides discussion of the findings and limitations of the study, as well as implications for policy, research, practitioners, and the researcher.

**Chapter Summary**

The field of human resource development has twin obligations to promote the performance of organizations and the satisfaction and welfare of all workers. Nevertheless, agriculture appears to be an understudied industry in the field, despite this
obligation and the potential for suffering experienced by workers performing crop work. This study considers the unusual case of an agricultural operation in California fostering optimal working conditions.
CHAPTER II

FARM WORKER WELFARE

On January 25, 2017, the President signed Executive Order 13767 which: (a) required the immediate construction of a wall on the Southern border, (b) ordered the hiring of an additional 5,000 boarder control agents, and (c) further empowered state and local law enforcement personnel to act as immigration control officers (Exec. Order No. 13767, 2017). In the first 100 days of his presidency, Immigration and Customs Enforcement arrested and detained more than 40,000 individuals believed to be in the United States illegally, which is a 40% increase over the same period one year prior (“ICE ERO Immigration Arrests,” 2017).

While the undocumented immigrants targeted by these measures represent only 5% of the American workforce, the agricultural industry employs a higher share of undocumented workers than any other industry (Passel & Cohn, 2016). The National Agriculture Workers Survey reported that in 2014, 47% of all agricultural workers were undocumented (US DOL, n.d.a), and 56% of agricultural workers in California also lacked legal status (US DOL, n.d.b)\(^1\), making the industry particularly vulnerable to changes in immigration policy, with one-half of agriculture workers at increased risk of possible deportation.

---

\(^1\) With one-third of contacted employers unwilling to participate in the National Agricultural Workers Survey, the data reported is vulnerable to nonresponse bias.
The administration’s immigration crackdown came amid a strong economy with low unemployment rates, increased employment opportunities for undocumented workers in the construction sector due to hurricane and wildfire recovery efforts, net-negative immigration from Mexico, and declining rates of farm worker children choosing to work in agriculture (Block & Penaloza, 2017; Gonzales-Barrera, 2005). Despite these structural changes the agricultural labor supply, agricultural employment in California has risen consistently over the last nine years (as presented in Figure 1) (State of California, 2017), with 55% of Californian farms reporting labor shortages (California Farm Bureau Federation, 2017). Given the current shortage and the higher labor costs associated with H-2A guest-worker visa programs, it is difficult to see where replacement workers will come from to replace those targeted by the administration’s immigration policies.

Figure 1. Estimated agricultural employment in California, 2009-2017 (State of California, 2017).
The administration’s actions impacting undocumented farm workers are nothing new, and in fact are the latest in a historical legacy that has marginalized this vulnerable workforce. The next section provides a brief overview of this history beginning with a definition of agricultural exceptionalism and continuing with a discussion of early labor rights legislation and immigration policy affecting labor demand.

**Harvesting Labor**

*Agricultural exceptionalism* is the historic and systematic exclusion of agriculture workers from labor protections due to the government’s special treatment of the agricultural sector (Arcury et al., 2012; Luna, 1998).

**Early Legislation**

In 1935, Congress passed the National Labor Relations Act (NLRA) which provided American workers the right to organize. Agricultural workers were excluded from this bill, and although it was anticipated that protections would ultimately be extended to farm workers under separate legislation, such a bill never passed (Kidd, 2005). As a result, farm workers do not have federal collective bargaining rights, (although 11 states including California have granted farm workers this right) (Telega & Maloney, 2010). Also in 1935, Congress passed the Social Security Act which provided unemployment insurance, social security, and workers’ compensation to most workers (Benson, 2008). Agricultural laborers were excluded from this bill, too. In 1938, farm workers were further excluded from minimum wage, overtime, and child labor protections under the Fair Labor Standards Act (Benson, 2008; Telega & Maloney, 2010). The exclusion of agricultural workers from important labor legislation had an adverse and disproportionate impact on minority workers who performed the bulk of
labor-intensive crop work under conditions reminiscent of plantation slavery (Benson, 2008).

**The Relationship Between Immigration Policy and Labor Demand**

During the depression, the American government deported approximately 500,000 Mexican agricultural workers (Tamayo, 2000). However, an agricultural labor shortage during WWII prompted Mexican and American governments to enter into an agreement detailing the conditions in which *braceros* (manual laborers) could enter and work in the United States (Valdés, 1995). Like the NLRA, the Bracero program did not give workers the right to organize, and the agreement proved too weak to be enforced. Farmers ultimately conspired with the Immigration and Naturalization Service to flood the market with undocumented workers who earned less than Bracero program workers, did not require labor contracts, and could be terminated or easily deported if they attempted to exercise labor rights.

Advancements in agricultural mechanization in the 50’s and 60’s, coupled with Johnson’s Great Society, decreased demand for unskilled foreign labor and drew foreign workers into other types of employment (Valdés, 1995). By the 1970’s, reliance on domestic agricultural labor resulted in higher wages, which prompted farmers to turn to foreign labor once again to reduce payroll and other compliance-related costs. Unemployment and welfare reform in the 1970’s and 1980’s added to anti-immigrant rhetoric which aimed to expel foreign workers from the country, including undocumented farm workers, despite the fact that economists had been unable to prove any linkage between the employment of undocumented farm workers and higher unemployment rates among American citizens. Holmes (2006) suggested that we seldom hear the other side
of the story, that “laborers are actively recruited by US employers to take jobs that US citizens most often are unwilling to fill, and that the laborers pay sales taxes as well as the federal, state, and local taxes taken out of their paychecks” (p. 1777).

In 1986, the Immigration Reform Control Act made it illegal for employers to knowingly hire undocumented workers (Valdés, 1995). This bill gave amnesty to existing workers, but a global economic downturn shortly thereafter resulted in another inflow of unauthorized workers into the United States. The passage of NAFTA in 1993—combined with a 300% increase in farm subsidies paid to domestic growers, and a decrease in farm subsidies in Mexico—made it impossible for Mexican produce farms to compete with those in the United States (Holmes, 2006). As a result of this legislation, both farm worker poverty and dependence on American jobs increased during the same period. This timeframe was marked by increases in violence against unauthorized workers committed by U.S. Border Control agents.

While it is difficult to ascertain the precise number of illegal immigrants entering the country from the Southwestern border, the number of apprehensions is the most commonly-used metric to estimate the number of people attempting to enter the country illegally. Figure 2 (below) presents this information for fiscal years 1960 to 2017.

![Figure 2](image-url)

**Figure 2.** Total apprehensions on the Southwest border by fiscal year from 1960-2017 (U.S. Border Patrol, n.d.).
As you can see from this data, total apprehensions have fallen by about 80% between the years of 1999 and 2017 when apprehensions were 1,643,679 and 303,916, respectively.

In summary, due to the legacy of agricultural exceptionalism, agricultural laborers remain excluded from certain key federal labor protections, regardless of citizenship status. Foreign-born workers remain particularly susceptible to geopolitical and economic fluctuations in the United States, with border control exercising weaker or tighter constraints depending on the labor demand and political rhetoric at the time. The next section will present a profile of current employment characteristics and worker demographics.

**Alternatives to Labor**

One alternative to using human labor to harvest crops is mechanization. While mechanization has already transformed the production of some crops, such as corn or wheat, an abundance of low-cost workers has sustained the use of humans to harvest other crops, like tomatoes and strawberries (Brat, 2015, State of California, 2017). For instance, the judgment needed to discern which strawberries are ripe and safe for consumption, and the care needed to pick them without bruising them, has mostly thwarted a move to mechanical harvesters. However, the technology is advancing to the point where robots are able to complete these tasks, making mechanization a viable alternative in the future (Bouffard, 2016; Peters, 2017). For instance, a Belgium company is testing a small robot equipped with vision and a hand to select and pluck ripe strawberries and does so without bruising them or leaving on the stem (Peters, 2017). At five seconds per berry, the machine is slightly slower than human pickers, but the cost
per berry is similar. The manufacturer hopes to have this machine available for sale in 2019.

A central Florida company has developed a mechanical wheel with six harvesting claws to pick and place strawberries into packaging (Bouffard, 2016). According to the manufacturer, this machine would save at least 8% on labor, with additional savings on plastic and packing costs. While the machine currently can pick three berries in eight seconds, the company hopes to cut this in half. The target is to have this machine available for purchase in 2020. While the Belgium machine requires strawberries to be grown in table-top planters, this machine can pick strawberries in the fields. For now, the berry industry is reliant on workers to pick its berries, as shown by the continued growth and demand for workers, as presented in Figure 3.

![Figure 3](image-url)  
**Figure 3.** Estimated employment in California, berry crops, 2000-2017 (State of California, 2017).
Agricultural Labor Employment and Demographic Characteristics

Labor-intensive crop production is “a system of cultivation using large amounts of labor and capital relative to land area” (Intensive agriculture, 2014). The U.S. Bureau of Labor Statistics (2019)’s Current Population Survey indicated that there were 2.5M workers engaged in agriculture and agriculture-related industries in 2018. The Occupational Outlook Handbook (2018) estimated that in 2016 there were 856,000 workers that were engaged in agricultural production, specifically, with the majority of workers found on large farms with annual incomes over $500,000 per year (USDA, 2008). However, government data may not accurately reflect individuals who are self-employed and other unpaid family members. Federal estimates may further underreport the level of labor force participation in labor-intensive crop production (Earle-Richardson et al., 2005), particularly due to the reluctance of farms employing unauthorized workers and unauthorized workers themselves to participate in voluntary government surveys.

The National Agricultural Workers Survey

The National Agricultural Workers Survey (NAWS) is the primary governmental data source on agricultural labor force characteristics and is sponsored by the Department of Labor (US DOL, 2016). The NAWS collects annual information on a variety of salient variables, including: (a) respondent and household composition and demographic characteristics, (b) migration and employment profile, (c) earnings and worksite characteristics, (d) occupational health and safety, and € legal status and social services utilization. The NAWS completes between 1,500 and 4,000 surveys in Spanish and English each year, and the survey is administered orally due to low literacy levels within the population. Findings are used for a variety of governmental programs and policies,
including “occupational injury and health surveillance, estimating the number and characteristics of farm workers and their dependents, and program design and evaluation” (para. 3). Table 1 presents employment characteristics from the 2013-2014 National Agricultural Workers Survey, and Table 2 presents worker demographics (US DOL, 2016). Both tables contrast California and national data.

Table 1. Hired Crop Worker Employment Characteristics, 2013-2014

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>California</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Employment type at current farm job:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Directly-hired</td>
<td>66%</td>
<td>85%</td>
</tr>
<tr>
<td>Labor-contracted</td>
<td>34%</td>
<td>15%</td>
</tr>
<tr>
<td><strong>Farm Experience</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average number of years of U.S. farm work experience</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>Average number of years with current farm employer</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Average number of farm employers in the last 12 months</td>
<td>1.42</td>
<td>1.34</td>
</tr>
<tr>
<td><strong>Earnings</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average hourly earnings at current farm job</td>
<td>$10.19</td>
<td>$10.19</td>
</tr>
<tr>
<td>Paid below the California minimum wage at current farm job</td>
<td>4%</td>
<td>n/a</td>
</tr>
<tr>
<td>Paid below the US minimum wage at current farm job</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Employment Stability</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average days worked on a farm last 12 months</td>
<td>205</td>
<td>192</td>
</tr>
<tr>
<td>Average weeks worked on a farm last 12 months</td>
<td>36</td>
<td>35</td>
</tr>
<tr>
<td>Average hours worked per week at current farm job</td>
<td>45</td>
<td>44</td>
</tr>
<tr>
<td>Average days worked per week at current farm job</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Average hours worked per day**</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td><strong>Hours Worked Over 40</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41-50</td>
<td>32%</td>
<td>28%</td>
</tr>
<tr>
<td>51-60</td>
<td>23%</td>
<td>17%</td>
</tr>
<tr>
<td>60+</td>
<td>4%</td>
<td>7%</td>
</tr>
<tr>
<td><strong>Primary task at current farm job</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-harvest</td>
<td>22%</td>
<td>26%</td>
</tr>
<tr>
<td>Harvest</td>
<td>27%</td>
<td>23%</td>
</tr>
<tr>
<td>Post-harvest</td>
<td>14%</td>
<td>18%</td>
</tr>
<tr>
<td>Semi-skilled (e.g., equipment operator)</td>
<td>37%</td>
<td>33%</td>
</tr>
<tr>
<td>Current farm employer provides health insurance or pays for health care for a non-work-related injury or illness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>79%</td>
<td>78%</td>
</tr>
<tr>
<td>Yes</td>
<td>13%</td>
<td>14%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>8%</td>
<td>9%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current farm employer provides health insurance or pays for health care for a work-related injury or illness</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Don’t know</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Workers’ Compensation coverage at current farm job</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Don’t know</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unemployment Insurance coverage at current farm job</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Don’t know</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Share of farm workers who have health insurance (all sources)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Don’t know</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-farm employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share who held a non-farm job in the last 12 months</td>
</tr>
<tr>
<td>Average number of non-farm work weeks last 12 months</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Plans to continue working in agriculture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
</tr>
<tr>
<td>1-3 years</td>
</tr>
<tr>
<td>4-5 years</td>
</tr>
<tr>
<td>5+ years</td>
</tr>
<tr>
<td>5+ years and as long as able to do the work</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Could find a non-farm job within a month</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Don’t know</td>
</tr>
</tbody>
</table>
Summary of employment characteristics of interest to this study are:

- Two-thirds of agriculture workers in California are hired directly by the farm. Contract-employees tend to earn less than hired farm workers due the fees paid to the contractor securing the arrangement (USDA, 2008). Since labor contractors generally have relatively few assets and often migrate seasonally themselves, it is difficult for the government to enforce compliance or collect damages on behalf of workers, in most cases.

- Farm workers in California and the United States are experienced in the agricultural industry, with 16 and 14 years of experience on average, respectively. Eighty-one percent of workers in California plan to continue in agriculture for five or more years, or as long as they are able.

- Employment is highly seasonal with workers averaging 35-36 weeks of employment each year. Unemployment in the agriculture industry was 9.6% nationally in February of 2018, compared to 4.4% for all other occupations (US BLS, 2018).

- Workers are at a disadvantage in finding other types of employment when seasonal work is unavailable due to low levels of education, literacy, ability to speak English, and immigration status (Hertz, 2016), as 66% of workers are either unsure or do not think they could find non-farm work within a month.

- Regardless of source (e.g., government, spouse, employer, etc.), two-thirds of agricultural workers do not have health insurance.

Table 2 presents an overview of farm worker demographics.
Table 2. Hired Crop Worker Demographics, 2013-2014

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>California</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>National Origin</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S.-born</td>
<td>9%</td>
<td>27%</td>
</tr>
<tr>
<td>Foreign-born</td>
<td>91%</td>
<td>73%</td>
</tr>
<tr>
<td>Mexico</td>
<td>89%</td>
<td>68%</td>
</tr>
<tr>
<td>Central America</td>
<td>1%</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Immigration Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authorized</td>
<td>44%</td>
<td>53%</td>
</tr>
<tr>
<td>U.S. citizen (by birth or naturalization)</td>
<td>14%</td>
<td>31%</td>
</tr>
<tr>
<td>Legal permanent resident (green card)</td>
<td>29%</td>
<td>21%</td>
</tr>
<tr>
<td>Other work authorized</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Unauthorized</td>
<td>56%</td>
<td>47%</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>74%</td>
<td>72%</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average age</td>
<td>39</td>
<td>38</td>
</tr>
<tr>
<td>Age first worked in U.S. agriculture: Before age 14</td>
<td>2%</td>
<td>6%</td>
</tr>
<tr>
<td>Age first worked in U.S. agriculture: At age 14-18</td>
<td>36%</td>
<td>34%</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average highest grade completed in school(^1)</td>
<td>7th</td>
<td>8(^{th})</td>
</tr>
<tr>
<td>No schooling</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>1st to 3(^{nd})</td>
<td>14%</td>
<td>10%</td>
</tr>
<tr>
<td>4th to 7(^{th})</td>
<td>36%</td>
<td>28%</td>
</tr>
<tr>
<td>8th to 11(^{th})</td>
<td>25%</td>
<td>26%</td>
</tr>
<tr>
<td>12th (high school graduate)</td>
<td>17%</td>
<td>21%</td>
</tr>
<tr>
<td>13 or more (college)</td>
<td>5%</td>
<td>11%</td>
</tr>
<tr>
<td><strong>English speaking ability (self-reported):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not at all</td>
<td>40%</td>
<td>27%</td>
</tr>
<tr>
<td>A little</td>
<td>34%</td>
<td>32%</td>
</tr>
<tr>
<td>Somewhat</td>
<td>12%</td>
<td>11%</td>
</tr>
<tr>
<td>Well</td>
<td>14%</td>
<td>31%</td>
</tr>
<tr>
<td><strong>English reading ability (self-reported)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not at all</td>
<td>52%</td>
<td>38%</td>
</tr>
<tr>
<td>A little</td>
<td>25%</td>
<td>23%</td>
</tr>
<tr>
<td>Somewhat</td>
<td>10%</td>
<td>9%</td>
</tr>
<tr>
<td>Well</td>
<td>13%</td>
<td>30%</td>
</tr>
</tbody>
</table>
Summary of notable demographic characteristics of interest to this study:

- The average personal income range for all agricultural workers in 2013-2014 was between $17,500 and $19,999, and the average family income range was between $20,000 and $24,999. Approximately 28% of families are below the poverty threshold, with about half needing public assistance. In May 2017, earnings for farm workers engaged in crop production was $11.96 per hour, on average, in California, or $24,870 per year (BLS, 2018). Wages have remained low in this industry despite the arduous and hazardous nature of agriculture work (USDA, 2008).

- California crop workers are 18% more likely to be foreign-born than the national average, with 91% and 73% born outside the United States respectively. California crop workers 9% more likely to be undocumented than the national average. Almost 100% of farm workers in California live in metro areas, compared to 56% nationally (Hertz, 2016).

- While 38% of farm workers in California entered agricultural work at age 18 or younger, the average age of farm workers is 39 years old. This is up nine years since 2000 when the average age of workers was 31 (U.S. DOL n.d.a).

- Californian farm workers are slightly less educated than the average for the United States— with 53% California workers having a 7th-grade education or less, and 18% having a 3rd grade education or less.
• Approximately 75% of California’s agricultural workers report little to no ability to speak or write in English.

• Workers in California have few opportunities to earn overtime pay, as state legislation mandates additional overtime compensation only for those employed 60 or more hours a week (Ulloa & Myers, 2016), which only 4% of workers do. Half of farm workers labor between 40 and 60 hours without additional overtime compensation.

**Indigenous Workers**

Seven percent of farm workers in California reported that they are indigenous peoples on the 2013-2014 National Agriculture Workers Survey, which is a decrease of 21% since 2005 (Gabbard, 2016). With a wide variety of customs and over 50 indigenous languages spoken in Mexico, indigenous workers represent a richly diverse segment of the farm worker population. Eighty percent come from west and south Oaxaca and 9% come from east Guerrero, and the primary languages spoken are Mixteco, Zapoteco, and Triqui (“Indigenous Farmworker Study,” 2010).

Due to the remote and isolated communities in which indigenous workers typically reside in Mexico, they often have lower levels of education, and experience higher rates of poverty (“Indigenous Farmworker Study,” 2010). They typically are the poorest workers in Californian agriculture, and their position on the bottom rung in the labor hierarchy may stem from societal status in Mexico due to widespread discrimination. Less is known about indigenous farm workers because interviewing them can require the assistance of two or more translators to translate from the indigenous
language to Spanish and into English. Alternatively, those who speak some Spanish may have difficulty expressing themselves due to limited vocabularies.

In summary, 91% of crop workers in California are foreign-born, and 56% of workers are undocumented. Almost 40% enter agriculture work at age 18 or younger, and the average age of workers is 39 years. California farm workers are slightly less educated than the average in the United States, with more than half of workers having a 7th-grade education or less, and almost 20% having a 3rd-grade education or less. Three-quarters report little or no ability to speak or read English.

California agriculture workers are more than twice as likely to be employed by labor contractors than the national average. They are stable in their careers, with approximately 15 years of agricultural experience on average, and most plan to continue in the industry for five years or more, if not the remainder of their careers. They are susceptible to unemployment due to the seasonal nature of agriculture work lasting 35-36 weeks per year, on average. Two-thirds are not covered by health insurance, and 77% are not covered by their employers’ worker compensation plans.

**Occupational Health and Safety**

More workers die in agriculture than in any other industry (National Safety Council, 2015). Despite high rates of injury, illness, and death, few studies have been conducted on the safety of workers engaged in labor-intensive crop production (Arcury et al., 2012). This section will present a brief overview of conditions that adversely impact the health and safety of agricultural workers.
Risk Factors for Poor Health

According to Kim-Godwin, Alexander, Felton, Mackey, and Kasakoff (2006), “many health problems suffered by farm workers are related to their occupation and substandard, overcrowded conditions, including dehydration, communicable diseases, heat stroke, parasitic infections, digestive disorders, dermatitis, depression, musculoskeletal problems, respiratory problems, unintentional injuries, and accidental death” (p. 28). Other health risks result from barriers to obtaining health care, such as lack of English proficiency, transient lifestyle, low levels of education, racism, fear of deportation, inaccessible clinic hours, and lack of health insurance, transportation, and childcare (Williams, & Avery, 2008). Twenty-seven percent of immigrant farm workers have never seen a physician, 25% have never seen a dentist, and 43% have never seen an eye doctor.

Housing and water. In 1983, the federal government established standards for housing in agricultural labor camps (Benson, 2008). Despite these protections, standards important to the health of all farm workers are seldom enforced. A study of employer-provided housing conducted by Benson (2008) found that many farm workers do not have adequate access to clean and safe drinking water. While farm operators are responsible for ensuring that drinking water is safe, Bischoff et al. (2012) found that 34% of immigrant labor camps in North Carolina failed to meet minimum water quality standards, with coliform found in all camps, E-coli in two-thirds, and water contaminated by human waste. Contaminated water is associated with respiratory illnesses, gastrointestinal illnesses, and hepatitis A. Inadequate or unsafe drinking water leads to an
estimated 2M diarrheal-related deaths worldwide each year, and contributes to cholera, cancer, and tooth/skeletal damage from a lack of chloride and presence of arsenic.

**Pesticide exposure.** Farm workers are often exposed to high levels of pesticides. Among the twelve produce items that contain the highest amounts of pesticides, nine—apples, strawberries, grapes, peaches, spinach, sweet bell peppers, nectarines, cucumbers, and snapped peas—are harvested by hand (Environmental Working Group, 2014; Sarig, Thompson, & Brown, 2000).

Currently, only the Environmental Protection Agency (EPA) regulates pesticide usage and training (Anthony, Williams, & Avery, 2008). The EPA indicated that between 10,000 and 20,000 agricultural workers suffer pesticide-related illness each year (Centers for Disease Control and Prevention, 2013). However, due to significant underreporting among by farm workers, the actual rate is presumed to be significantly higher (U.S. Government Accountability Office, 1994). Symptoms and conditions caused by pesticide exposure include “cancer, birth defects, reproductive dysfunctions, neuropsychological and behavioral problems, mood disturbances, cognitive dysfunction, neuromuscular problems, skin sensitization, respiratory disease, and abnormalities in liver and kidney organ functioning” (Halfacre-Hitchcock, McCarthy, Burkett, & Carvajal, 2006, p. 56). Although pesticides are particularly hazardous to pregnant women, little research has been conducted to highlight the unique health risks facing female agricultural laborers of child-bearing age (Flocks, Kelley, Economos, & McCauley, 2012, p. 626).

A key piece of legislation impacting pesticide safety and use is the Worker Protection Standard, which requires growers to provide safety training, advanced notice
of pesticide application, protection equipment, notice of restricted entry in areas where pesticides have been applied, and medical assistance when needed (Halfacre-Hitchcock, McCarthy, Burkett, & Carvajal, 2006, p. 57). Unfortunately, the bill has had little effect on the incident rates of pesticide exposure, as the “majority of farm workers have not been trained, and those that have received formal training often found the training ineffective due to language barriers and brevity of training” (p. 57).

**Vision.** Eye injuries result from tools, equipment, plants, and exposure to the elements including wind, chemicals, dust, light, and allergens (Quandt et al., 2008). Eye safety practices of farm workers are severely lacking as only 9% wear safety goggles. As a result, “farm workers have significant levels of vision problems and make insufficient use of medical care” (p. 16). Twenty-percent rate their vision as poor to fair, compared to 6.4% in the general population.

**Psychological and physiological conditions.** Farm workers suffer twice the rate of psychiatric disorders than the general population (Chaney, Rager, & Ward, 2011), and are less likely to seek mental health treatment due to cultural norms about the nature of seeking and receiving help, and lack of access to care. As Holmes (2006) noted, past studies indicated that the rate of behavioral-related conditions among farm workers such as “obesity, serum cholesterol, tobacco smoking, alcohol use, illicit drug use, mental illness, suicide and death by homicide” increase with time spent in the United States, whereas nutritional health decrease.

Between 30% and 40% of farm workers suffer depression (Chaney, Rager, & Ward, 2011). This is attributed in part to “language conflict, lack of social support, discrimination, and legal residence status” (p. 234). Depression is comorbid with other
conditions found among farm workers in unusually high rates, such as asthma, heart disease, arthritis, diabetes, substance abuse, and weight gain. Similar to factors contributing to depression, Garcia and Gondolf (2004) found that social isolation, separation from loved ones, and peer influence are highly correlated with problem drinking.

**Safety culture.** Employer attitudes are important in establishing a safety culture. In a survey of grower attitudes, farm operators indicated that they believe most safety regulations are “an unnecessary burden” compared to the farm’s economic survival, and that most farm workers freely accept the health risks associated with agricultural work (Arcury et al., 2012). This aligns with the 78% of farm workers that reported “the grower was most concerned about getting the work done quickly and cheaply,” and the more than one-quarter that “felt that production was more important than safety for their employers” (p. S276). Farm operators were found to develop and implement safety procedures for themselves when the same protections were not in place for their workers. While some farmers informed farm workers about workplace dangers, this often did not apply to new hires.

A study by Weinstein and Shuck (2011) found that undocumented immigrants in the construction sector understood the risks of not wearing safety equipment but chose not to ask supervisors for replacement safety equipment out of fear. Given vulnerability to job loss, harassment, or deportation, farm workers also may not report health problems out of fear, as enforcement of laws intended to protect them is poor (Arcury et al., 2012; Holmes, 2006). An additional safety risk is cultural, and the “willingness of farm workers to accept unsafe work conditions is bolstered by a belief system in which men
are expected to accept danger, and they are expected to act as if they will not be harmed by exposure to hazards” (Arcury et al., 2012, p. S272).

**Race and ethnicity.** Holmes (2006) found that agricultural labor conditions are highly stratified by race, ethnicity, and national origin. White or Asian-American citizens work at the top of the hierarchy, followed by Latino-American citizens, undocumented (non-indigenous) Mexican nationals, and then undocumented (indigenous Triqui or Miztec) Mexican ethnicities (Holmes, 2006; Holmes, 2013). Those at the bottom rungs live in the most undesirable housing and perform the most dangerous or unwanted tasks (Holmes, 2006). This hierarchy is rationalized by participants at all levels with the argument that certain races or ethnicities are more suited to different types of work. For instance, Holmes (2006, 2013) reported that the inhumane treatment of indigenous workers was often accompanied by statements, such as they “are more simple,” “like to bend over,” or that it is okay if they get sprayed by pesticides because they are “stronger than Americans” (Holmes, 2006; 2013).

In Holmes’s (2006) study, strawberry pickers were identified as being at the bottom of the labor hierarchy because they were assigned to pick the crop with the most demanding quota and least favorable working conditions. Workers who did not meet the quota of picking 50 pounds of strawberries per hour could lose their jobs and their living quarters. This quota is so high, in fact, workers were observed not eating or drinking before or during work to avoid having to interrupt production to use the restroom. Strawberry pickers typically worked seven days per week, rain or shine, unlike other crop farm workers within the same farm who were required to work less.
**Sexual harassment (including sexual assault).** Cortina (2004) reported that between 2% and 13% of women who have experienced sexual harassment in the workplace report it to the organization. Of the approximately 75% to 80% agriculture workers who experienced sexual harassment (Kim, Vásquez, Torres, Nicola, & Karr, 2016), reporting rates would certainly be low given power differentials between the harasser and the extreme vulnerability of the victim due to gender, skin color, national origin, immigration status, poverty, and well as lower levels of education, literacy, and ability to speak English (Tamayo, 2000). This vulnerability is exacerbated by the potential isolation of those living and working on agricultural operations, potential dependence on their abuser for access to food, shelter, and clothing for themselves and their families, and the constant fear of possible deportation of the victim and/or any family members who may be here illegally. Given this vulnerability, victims of sexual harassment often have to weigh the potential consequences of reporting the abuse versus tolerating the incalculable suffering from remaining silent and possibly enduring additional incidences of trauma. Tamayo (2000) wrote, “Issues such as whether there is food on the table, whether their children will have clothes, whether they will have a roof over their heads… are at stake” (p. 1075).

In a study by Kim, Vásquez, Torres, Nicola, and Karr (2016), women reported experiences of quid pro quo and hostile work environment, including demands for sex in order to get enough hours to survive, and threats of termination if they did not comply. In addition to threats of retaliation, the victims who complain to employers (and even to the EEOC) of sexual harassment may be discredited due to lack of corroborating evidence, when it is likely “the only witnesses to harassment are the victim and the
harasser” (Tamayo, 2000, p. 1075). Sadly, one woman reported leaving her job to escape harassment, only to find other workplaces were the same (Kim, Vásquez, Torres, Nicola, & Karr, 2016). Another agreed, “wherever you go it’s the same, wherever you work it’s the same” (para. 16). The prevalence of this behavior leaves some women to assume men “are looking at you with a dirty mind. You expect they are going to say bad things to you, you don’t trust” (para. 19). To deter unwanted attention, women in the study said they lie about marital status and sexual orientation and wear baggy clothes and additional clothing to cover their backsides so men will leave them alone. One woman reported using a male voice at work to discourage men from harassing her. Another survivor said that after she was victimized her female co-workers said she was promiscuous.

In summary, agricultural workers are susceptible to illness, injury, and even death resulting from substandard or unsanitary housing, contaminated water, pesticide exposure, psychological distress, inadequate safety practices, discrimination, sexual harassment, and assault. Given the data presented in this section, it is not surprising that 95% of farm workers “believed that they will be injured within a year” (Arcury et al., p. S276).

**Motivational Attitudes and Beliefs in Mexico**

Harrison and Hubbard (1998) examined employee satisfaction and organizational commitment of employees working for an American firm in Mexico, finding that satisfaction is linked to compensation, opportunities for advancement, interpersonal relationships, and supervision. Satisfaction was also found to increase with age and tenure, which could be attributable to the greater respect and better treatment afforded to elders. Traditional gender roles and acceptance of gender inequality have been linked to
lower organizational commitment by women (Harrison & Hubbard, 1998; Pavette & Whitney, 1998).

Employees indicated a strong preference for participative and group decision making over individual decision making, and a reluctance to admit failures or give individual feedback (Harrison & Hubbard, 1998; Pavette & Whitney, 1998). The preference for group decision making may be due to the collectivist nature of the culture and increased attention given to ensure the harmonious functioning of groups. Individuals are more accepting of power differences and autocratic management styles and may be fearful of speaking up out of concern it could be perceived as being critical of management with whom they are deferential (Harrison & Hubbard, 1998; Pavette & Whitney, 1998). Individuals build networks of harmonious interpersonal connections and friendships at work which they can turn to for help and will provide support in return (Pelled & Xin, 1997).

Commitment is higher in organizations exhibiting efforts to improve productivity and effectiveness, as workers see their interest in having job security aligned with the success of the organization (Harrison & Hubbard, 1998). Moderately high levels of uncertainty avoidance and intolerance of ambiguity has been observed in this population (Pavette & Whitney, 1998). Pelled and Hill (1997) found lower rates of organizational commitment and higher turnover intentions among individuals desiring to advance continually and higher commitment when someone has a job that is perceived by others as a good one. According to Pelled and Xin (1997) found that work is “viewed as a means to an end (employment and the support of one’s family), rather than an end in itself” (p. 187).
Theoretical Framework

The theoretical framework for this study provides a lens through which optimal working conditions in labor-intensive crop production may be examined, understood, and potentially developed and replicated elsewhere.

Herzberg’s Two-Factor Theory

Herzberg (1959; 1966)’s motivation-hygiene theory is used to distinguish between two categories of human needs—physiological and psychological. Herzberg theorizes that by meeting the needs in both areas, an employer will increase motivation, performance, and productivity. Problem-solving and strength-based approaches are also introduced as change processes which can be used to foster working condition where physical, safety, and psychological needs are met, and employees are motivated and productive.

Herzberg (1966) suggested that humans have two sets of needs. The first set of needs is focused on avoidance of pain; the second set compels us to reach our potentiality through continuous psychological growth. Herzberg’s motivation-hygiene theory enables us to examine the relationship between satisfaction and motivation. Essentially, Herzberg (1968)’s research found that labor conditions producing “job satisfaction (and motivation) [were] separate and distinct from factors that lead to job dissatisfaction” (p. 56). In other words, the conditions that either motivate or dissatisfy employees with their work are neither opposite nor inversely related. Rather, they are different from one another.

Herzberg suggested that hygiene factors are the essential physical and safety conditions that prevent job dissatisfaction, and are unrelated to job content (Herzberg,
Herzberg identified the following characteristics as hygiene factors: company policy and administration, supervision, interpersonal relationships, working conditions, compensation, personal life, status, and security (Herzberg, 1968; Sachau, 2007). Under this theory, unmet needs in any of these areas will result in dissatisfaction.

The factors that produce job satisfaction are psychological, long-term, and intrinsic to the job itself (e.g., achievement, opportunity to learn) (Herzberg, 1968; Sachau, 2007). Herzberg termed these motivator factors, because an employee will be motivated to perform when their psychological needs are being satisfied. Herzberg linked the presence of achievement, recognition, interesting work, responsibility, advancement, and learning on the job to increased levels of employee satisfaction, motivation, self-directedness, and productivity (Herzberg, 1968; Sachau, 2007). Motivator factors are additive, in that these conditions may be added to enrich work.

Herzberg’s theory is well-suited as a framework to analyze the working conditions in labor-intensive crop production for three reasons: (a) the conditions commonly experienced may be characterized as lacking hygiene factors, (b) hygiene factors must be adequate for an employee to reach a baseline of not being dissatisfied in their work, and (c) this study seeks to examine an unusual case where an agricultural operation offers optimal labor conditions—optimal here being characterized as containing both hygiene and motivator factors.

**Herzberg’s theory in the literature.** Herzberg’s (1959) seminal study sought to discover what employees want from their jobs by attempting to identify factors that cause employees to view their jobs negatively or positively, whether these factors were the
same or different, and whether they have short- or long-term effects on employee perceptions of their work (Herzberg, Mausner, & Snyderman, 1959). Although the study was conducted with 203 engineers and accountants from several firms in the United States, pilot tests for this study also included clerical and production employees. The selection of engineers and accountants, specifically, was made because these employees were found to be more verbal and communicative than other employee groups during pilot interviews. Since the results of this study were first published in 1959, the theory has been utilized to examine satisfaction and motivation in a wide variety of contexts.

A review of prior scholarship on Herzberg’s theory revealed a pattern of studies that sought to identify and measure the impact hygiene and motivator factors on employee dissatisfaction, satisfaction, and motivation. Consistent with Herzberg’s theory, a study of principals in Canada found that employee satisfaction and was enhanced by motivator factors (i.e., recognition and challenging work) and hygiene factors (i.e., administrative policies and interpersonal relationships) (Wang, Pollock, & Hauseman, 2018). A study of excellent teachers in Malaysia by Ismail, Yahya, Sofian, Hussin, and Raman (2017) revealed that teachers were not satisfied with available growth opportunities and were dissatisfied with supervision. Rathavoot and Ogunlana (2003) studied construction foremen in Thailand, and found that in keeping with Herzberg, responsibility, advancement, and growth contributed to job satisfaction, while working conditions, job security, and relationships with others contributed to dissatisfaction (p. 305). A study of public sector managers in the United States supported Herzberg’s theory that motivators increased satisfaction with the work and hygiene factors have no impact on satisfaction (Hur, 2018).
Interestingly, some authors disputed Herzberg’s strict assessment that a lack of hygiene characteristics creates either dissatisfaction or no dissatisfaction, and presence of motivation characteristics (or lack thereof) creates no satisfaction or satisfaction. For instance, Rathavoot and Ogunlana (2003) identified recognition, the work itself, and policy, and administration influencing satisfaction and dissatisfaction both. Machungwa and Schmitt (1983) investigated the satisfaction of workers in Zambia, and found that salary, working conditions, interpersonal relationships, organizational policies and administration influenced satisfaction, even though Herzberg identified these as hygiene factors. Hines (1973) identified supervision and interpersonal relations (e.g., hygiene factors) as influencers of satisfaction among workers in New Zealand. Butt (2018) found that compensation and benefits (also hygiene factors) impacted employee satisfaction in a study of administrative staff in the telecom industry in Pakistan. Mustata, Fejete, and Matis (2011) studied accounting professionals in Romania twenty years after the fall of the communist regime and found that compensation is a motivator and advancement a hygiene factor.

Other studies suggest that different occupations have different preferences for hygiene or motivator factors. For instance, when attempting to determine what drives students to choose between private- and public-sector employment opportunities, Sahinidis and Kolia (2014) found that contrary to prior research, extrinsic (hygiene) factors were not considered by students when choosing public-sector employment. Nair and Ghosh (2006) studied entry-level managers in four industries in India finding that preferences for hygiene and motivators varied by field, with manufacturing managers preferring hygiene factors, and consulting valuing both factors equally.
Some evidence suggests that hygiene or motivators could vary as a person’s needs change throughout their career. For instance, Thalitath and Rejoice (2012) found that among IT professionals in Bengaluru, India, hygiene characteristics take precedence over motivator factors when looking for employment. McLean, Smits, and Tanner (1996) found compensation motivates new-graduate IT professionals, but with time and career growth, other motivating characteristics become more valued, and pay becomes a hygiene factor. Nair and Ghosh (2006) found that entry-level IT managers value motivators over hygiene factors. Herzberg (1959) stated that while he classified compensation as a hygiene factor, it can be a motivator when it is provided to award recognition or for achievement or when the basic threshold for compensation needs has not been met. Below that basic income threshold, Bassett-Jones and Lloyd (2005) wrote, “inadequate financial reward can demotivate” (p. 932).

Different job factors from Herzberg were also identified. Shannon (2019) examined motivation of frontline and emerging managers in the health and human service sector in Tasmania identifying that communication was the most significant factor affecting employee motivation, and that emotional and resource factors are also needed to motivate employees. Mustata, Fejete, and Matis (2011) identified team as a motivator. Rijavec & Ridicki (2000) found that peace is an important motivator among elementary school teachers in post-war Croatia. Breslin, MacNab, Worthley, Kibigting, and Jukis (2005) found evidence of a possible motivational shift in Japan, with workers beginning to value lifetime employability over lifetime employment. Bitsch and Hogberg (2005) identified family-value style management as a motivator among horticulture workers.
Aplander & Carter (1991) compared multinational intracompany differences in eight international subsidiaries and found that while the need to control one’s work seemed to be a universal need, other motivator and hygiene needs may be culture-specific. Di Cesare & Sadri found that while people share the same fundamental needs, cultural differences impact motivation, and can even influence how people interpret concepts like satisfaction (Di Cesare & Sadri, 2003).

**Criticisms of Herzberg’s theory.** While Herzberg found that employees can be either be satisfied or dissatisfied with motivator and hygiene factors, respectively, the studies presented here suggest that employees may be either satisfied or dissatisfied with either factor, and that preferences may vary widely with occupation, career level, employment status, economic need, culture, beliefs, and/or country. Another explanation for these differences in outcomes relates to criticisms of the theory itself. Hinrichs and Mischkind (1967) stated that the Herzberg’s theory is limited by a “mounting body of contradictory results and inability… to handle deviant cases” (p. 191). According to House and Wigdor (1967), the theory has been criticized as methodologically bound in its use of the critical incident technique in which individuals were asked to describe unusually positive or negative events. The potential for bias emerges from the tendency of people to enhance and protect their sense of self-worth by taking credit for things that go well and blaming the environment for things that fail (Vroom, 1964; 1966). Furthermore, House and Wigdor (1967)’s review of the literature found that the idea that the factors creating satisfaction and dissatisfaction are unidimensional and independent is problematic, as the distinction between dissatisfied and satisfied (e.g., not dissatisfied, neutral, or not satisfied) is arbitrary.
**Herzberg’s theory in the agriculture literature.** Although research on Herzberg’s two-factor theory in agriculture is largely limited to agricultural education faculty and extension office personnel (Bowen & Radhakrishna, 1991; Foor & Cano, 2011; Myers, Dyer, & Washburn, 2005), a study using Herzberg’s theory was conducted on horticulture workers (Bitsch & Hogberg, 2005). Approximately half of the workers in this study were Hispanic. The authors used the theory to analyze interview data by counting positive and negative experiences relative to each workplace characteristic identified by Herzberg. Their results both confirmed and contradicted his theory. On the aggregate, employees provided more positive statements than negative about motivator and hygiene factors alike, and while dissatisfaction was mentioned more often in reference to hygiene factors than motivator factors, this difference was small. The authors noted an apparent preference by employees to remain positive. Strong support was found for motivation from achievement and recognition, and authors found the work itself functioned as a hygiene factor rather than a motivator. The authors posited the explanation that nonsupervisory employees may have fewer opportunities to enjoy the work itself than in other occupations. Many more positive statements referring to personal life, interpersonal relations, relationships with supervisors, and job security were made than negative, suggesting to the authors that these also may have motivational value. Employees reported that “Not only do they share their workplace with friends and even family… they also admire their supervisor’s flexibility in accommodating their individual preferences and necessities of their family life (p. 666).

Although the work is seasonal, workers reported that they have job security in that they can return every year (Bitsch & Hogberg, 2005). Knowing “a job will be waiting for
them” to return is a motivator, according to the authors. Perspectives on supervisory skills varied with some stating they appreciate flexibility, understanding, and constructive feedback, and while positive remarks were recorded twice as often as negative, other employees reported poor communications with supervisors who demonstrated favoritism, or talked down and were critical of them. Workers reported more positive statements than negative about working conditions, being outside, and working in agriculture. The condition of facilities is important to workers and policies were found to be useful but not entirely sufficient at the worksite.

While compensation is sometimes considered a source of dissatisfaction among employees in low-paying or entry-level jobs, workers reported positive statements regarding pay more frequently than negative, and they appreciated bonuses for desired behaviors, like punctuality (Bitsch & Hogberg, 2005). Workers reported better wages and benefits as factors which would cause them to accept different employment.

The authors also identified characteristics not identified by Herzberg that affected motivation (Bitsch & Hogberg, 2005). Family values, and the belief that their employer is looking out for them and they have access to top management was found to increase motivation. The authors also described participative decision making as motivating as well. A third characteristic found is dissatisfaction with a lack of transparency in company information on topics including ownership, finances, and long-term business plans. Employees reported that they did not like feeling in the dark.

The author’s concluded that based on their analysis, that support for Herzberg’s theory is weak, with “no clear-cut boundary between positive and negative feelings about the job along the line of content versus context factors,” with some context factors
motivating workers, and content factors, like the manual and general labor nature of the work itself, having the potential to dissatisfy (Bitsch & Hogberg, 2005, p. 669). The authors suggested that given that employees can be dissatisfied and satisfied with the same factors, that the two factors could substitute for one another. For instance, an employer may not be able to afford to give raises, but they could provide more opportunities for recognition or achievement which do not require a financial commitment.

In short, the authors found employee satisfaction related to personal life, interpersonal relationships, supervision, job security, working conditions, family values, and participative decision making. These results are consistent with House and Wigdor (1967)’s finding that the factors identified by Herzberg as creating satisfaction and dissatisfaction are unidimensional and independent is problematic. As was stated earlier, other authors found that some characteristics can be sources of satisfaction and dissatisfaction both, and that hygiene factors can be sources of motivation and vice versa.

Change Orientations

By attempting to understand the process through which a single agricultural operation fosters optimal labor conditions consisting of both hygiene and motivator factors, it is the researcher’s hope this study will provide insight into how these conditions may be sustained and fostered elsewhere. Therefore, a vital component of the framework is a process for how these processes are developed. To this end, this framework has been enhanced with the addition of problem-solving and strength-based approaches to change.
Problem orientation for hygiene factors. Job dissatisfaction will arise if any hygiene factors—policies, administration, interpersonal relationships, working conditions, compensation, status, or security—are inadequate (Herzberg, 1968; Sachau, 2007). Crop workers are vulnerable to poverty, sickness, injury, discrimination, harassment, and death resulting from a lack of legal protections and hazardous health and safety conditions—conditions emblematic of agricultural exceptionalism and structural violence theory.

Problem-solving is a common approach in HRD (Gupta, Sleezer, & Russ-Eft, 2007; Kuchinke, 2007; Morrison, Ross, & Kemp, 2007; Rummler, 2007; Swanson & Holton, 2009) that can be used to solve “a question, matter [or] situation… that is perplexing or difficult” (Agnes, 2006, p. 1444). In the case of the health and safety of crop workers, the goals of problem-solving efforts could be to: eliminate the agricultural labor exclusion from all labor laws, provide greater enforcement and monitoring of existing health and safety regulations, expand current enforcement of health and safety legislation, eliminate the agricultural labor exclusion from all federal labor protection statutes, prosecute criminal offenses committed against crop workers, and provide additional health and social services, as needed. Potential change agents could be public servants (e.g., lawmakers, administrators, and courts), media, advocates, labor unions, social service providers, farm operators, and the agricultural industry. HRD can contribute to the improvement of health and safety through the development of training and performance solutions, however, since our field is highly varied in how HRD is practiced (Kuchinke, 2003), this work may be performed by change agents with or without formalized training in HRD.
While expanding legislation, eliminating legislative loopholes, providing additional health support services, and providing greater monitoring and enforcement of health and safety regulations through problem-solving is necessary to improve the physical safety of crop workers, Herzberg suggested that eliminating physical suffering from a job will not increase motivation without opportunities provided for psychological growth (Herzberg, 1968; Sachau, 2007).

**Limitations of problem-solving.** Problem-solving approaches focus narrowly on the alleviation of pain rather than growing and nourishing core human potential—a fundamental tenet of our profession (Swanson & Holton, 2009). While certain problems, such as those that threaten the health and safety of workers, demand the immediate attention and the investment of resources, an over-emphasis on deficits could cause the conditions that bring innovation into the workplace to get lost along the way (Seligman, 2000). Problem-solving can inhibit innovation and learning and discourage experimentation because it encourages people to insulate themselves from risk and potential blame (Barrett & Peterson, 2000). Eventually, individuals become unable to see the “radical possibilities beyond the boundaries of problems” (Barrett, 1995, p. 37), and their capacity “to produce innovative theory capable of inspiring the imagination, commitment, and passionate dialogue” becomes eroded (Ludema, Cooperrider, & Barrett 2006, p. 155).

**Strength orientation for motivator factors.** Herzberg’s theory suggests that employee motivation, performance, self-directedness, and productivity will be increased with opportunities for achievement, recognition, interesting work, responsibility, advancement, and learning (Herzberg, 1968; Sachau, 2007). Notwithstanding the poor
working conditions likely suffered the by the majority of crop workers, first-hand accounts and anecdotal reports in the news and media provide rare glimpses into unusually positive crop worker conditions that meet both basic physical and safety needs, and offer an additional growth or developmental component (e.g., literacy or GED classes) or a social enrichment component (e.g., community center) (California Human Development, n.d.; California Institute for Rural Studies, n.d. While Herzberg (1968) classified interpersonal relationships as a hygiene factor, Sachau (2007) described this as a mistake because positive interpersonal relationships are linked to employee satisfaction and psychological growth.

**Positive psychology.** Positive psychology is the study of human strengths and is surprisingly consistent with Herzberg’s conceptualization of the motivation side of his model (Sachau, 1997). Studies have shown that positive psychology can be used to enhance performance, engagement, productivity, motivation, and skill development (Sachau, 2007; Martin, 2005). For instance, Fredrickson (2001) found positive emotions have healing qualities that lead to greater resiliency and increased ability to cope with adversity in the long-term. Isen (2001) linked positivity with enhanced decision-making and problem-solving capability and improvements in social relationships that are marked by improvements in generosity, helping, and understanding.

**Appreciative inquiry.** While positive psychology is the study of the conditions in which human beings thrive, it is not in itself an organizational change method. Appreciative inquiry, however, is a collaborative organizational change process that can be used to discover, replicate, and extend the very best in individuals and in groups. On a micro level, appreciative inquiry “seeks to discover people’s exceptionality – their unique
gifts, strengths, and qualities. It actively searches and recognizes people for their specialties – their essential contributions and achievements” (Cooperrider, 2001, p. 12). An employer can enrich a job and increase motivation and performance by investigating and attempting to understand a worker’s unique strengths and abilities, and then creating the conditions for them to perform at their best. On an organizational level, appreciative inquiry discovers the very best performance conditions within the agricultural operation, and this information can be used to amplify and sustain peak performance. At a macro level, appreciative inquiry’s “generative capacity” enables us “to challenge the guiding assumptions of the culture, to raise fundamental questions regarding contemporary social life, to foster reconsideration of that which is ‘taken for granted’ and thereby furnish new alternatives for social action” (Gergen, 1978, p. 1346). By identifying the best in labor conditions and understanding more about the linkages between fostering optimal labor conditions, and an agricultural operation’s health, innovation, productivity, and performance, new ideas for action will be generated. As plants “grow toward the sun, organizations will also move toward images of their future that are life-giving and hopeful” (Hart, Conklin, & Allen, 2008, p. 634).

Positive psychology and appreciative inquiry can be used to cultivate agricultural labor conditions for workers to be motivated and to thrive. Appreciative inquiry may be used to discover the positive effects that these conditions have on the health and performance of the agricultural operations, and this information can be provided to community and advocacy organizations as a model for agricultural operations—and provided to the agricultural industry as a whole, as an incentive for wider change. The potential change agents would be advocates, agricultural operators, and HRD and
organizational development practitioners. Figure 4 provides a visual illustration for this of how each of these theoretical perspectives may be considered for the purpose of this study.

Figure 4. Fostering optimal labor conditions through motivator-hygiene factors

This framework illuminates the following potential themes for examination in this study: physical conditions, safety conditions, policies and administration, compensation, interpersonal relationships, job satisfaction and motivation, performance and productivity, change agents, and psychological growth needs.

**Structural Violence Theory**

As a typology, structural violence theory has been used to explain violence as a process since the concept was first introduced by Galtung in 1969. Galtung and Höivik (1971) operationalized conditions like the unsafe and unhealthy conditions endured by agricultural laborers as a form of violence termed structural violence that in time kills
slowly, undramatically, and anonymously. An example of possible structural violence
would be if the child of farm worker parents has cancer, and it is impossible to ascertain
if the disease was the result of pesticide exposure by either parent prior to conception,
during pregnancy, or after the child was born or if it had anything to do with pesticide
exposure at all. This leaves nobody to blame or held responsible for a disease when it
may have been prevented.

Structural violence is opposed to violence that is direct, such as violence that kills
quickly, can be counted, and is attributable to an identifiable cause, such as war or
murder (p. 73). Direct violence is conceptualized as it relates to the needs that are met
through war, such as the killing of one group to protect the survival of another, the denial
of basic necessities (such as food, water, or medical attention) in order to allocate more
food, water, and medical attention to the survival of others. While death that results from
acts of aggression is direct violence, exploitation is the centerpiece of structural violence.

Galtung (1990) described exploitation as unequal economic exchange between the
privileged and the oppressed such that oppressed “may in fact be so disadvantaged that
they die (starve, waste away from diseases)” (p. 293). In addition to possibly dying from
unequal exchange, they may endure a “permanent unwanted state of misery, usually
including malnutrition and illness,” in which they are kept in the dark about the purpose
their exploitation serves (p. 293). Farmer (2004a) characterized structural violence as
“poverty and steep grades of social inequality, including racism and gender inequality”
that is “exerted by everyone who belongs to a certain social order” (p. 307). Kirmayer
(2004) went further, stating that “everyone who participates in an oppressive social order
is complicit in it, but the more privileged we are the more we are loath to acknowledge our complicity” (p. 321).

Galtung (1990) identified cultural violence as a rhetorical stance used to justify or legitimize direct and structural violence. A long-term consequence of cultural violence is that it can condition both the perpetrators and victims of structural violence to accept massive inequality in the world as natural and even as “nobody’s fault” (Farmer, 2004a).

A review of the available research on structural violence shows a wide-range of global applications, particularly relating to gender inequality. While the vast amount of empirical research on structural violence has been ethnographic, several quantitative attempts have been made to measure the effects of structural violence in terms of years of life lost (see Galtung & Höivik, 1971; 1977). To measure the full human suffering from structural violence, argued Farmer (2004a), requires us to “tally body counts” (p. 308).

Kim-Godwin, Alexander, Felton, Mackey, and Kasakoff (2006) reported that the years lost by agricultural laborers lives could be as many as 28, compared to the life expectancy of people engaged in other occupations.

The health and labor disparities evidenced in the case of farm workers in the United States are the embodiment of structural violence, as is the legacy of agricultural exceptionalism, where foreign workers were pushed and pulled in and out of our country depending on the unemployment rate and political whims of the time, and the “deplorable wages and endemic poverty, forms of stigma and racism, occupational health and safety hazards, poor health and limited access to services, and the constant threat of deportation” (Benson, 2008). As a process, structural violence is perpetuated by an “erosion of social awareness” and erasure of history to decontextualize human suffering.
and the systematic political and economic dominance it serves (Farmer, 2004). Without this context, “no one is to be held accountable for the inequalities of everyday life experienced by those at the bottom” (Green, 2004, p. 319).

**Chapter Summary**

The literature revealed that the agriculture industry employs more undocumented immigrants than any other industry, with over half of farm workers in California lacking legal status. Current immigration enforcement and uncertain immigration reform are the latest acts in a legacy of agricultural exceptionalism which marginalizes agriculture workers by excluding them from important labor protections and allowing the exploitation of foreign-born workers according to the economic needs and political rhetoric at the time. The industry is currently under pressure to develop mechanized and robotic harvesting techniques to reduce the dependence on human labor.

The majority of California farm workers are hired directly, and have 16 years of experience in the industry, on average. Employment is seasonal and lasts approximately 36 weeks a year and workers have difficulty finding employment in the off-season. Approximately 30% of farmworker households live below the poverty line, and workers do not have access to overtime compensation under 60 hours of work a week in California. Ninety-percent of workers were born outside the United States, and over half have the equivalent of a 7th grade education or less. Farm workers face a variety of health risks from substandard housing, contaminated water, pesticide exposure, substance abuse, discrimination, and sexual harassment and assault. Gaultung’s (1969) structural violence theory is provided to explain that the exploitation experienced by most farm workers is the result of how suffering is structured in society.
Herzberg’s (1966) motivation-hygiene theory provides a lens to examine the relationship between satisfaction and motivation with the physical and psychological needs of crop workers in an effort to understand optimal work. Herzberg suggested that *hygiene* factors are the essential physical and safety conditions that prevent dissatisfaction, and are unrelated to job content (Herzberg, 1968; Sachau, 2007). *Motivator* factors produce job satisfaction and are psychological, long-term, and intrinsic to the job itself. Herzberg’s motivation-hygiene theory is well-suited as a framework to analyze the working conditions in labor-intensive crop production, as the case selection criteria for this study are indicative of employment inclusive of both hygiene and motivator factors.

A second component of the theoretical framework is problem- and strength-based approaches to change. Problem-solving is a common approach that can be used to eliminate conditions producing dissatisfaction with the job; however, problem-solving will not lead to employee motivation alone. To understand the conditions in which crop workers will be motivated and thrive, this framework has been further enhanced with strength-based approaches to create change. The first strength-based approach discussed, positive psychology, can be used to cultivate conditions for workers to be motivated. The second approach, appreciative inquiry, may be used to discover the positive effects a motivated and thriving workforce has on the health and performance of the agricultural operation. This information can then be provided to community, advocacy, and agricultural organizations as a model for change.
CHAPTER III
FIELDWORK

This chapter provides an overview of the rationale for selecting a qualitative case study methodology, the features of this approach, and the process used for collecting and analyzing data. This chapter concludes with discussion of ethical considerations and researcher positionality.

Research Purpose and Questions

The purpose of this study is to understand the process through which a single agricultural operation fosters optimal conditions for workers engaged in labor-intensive crop production. The research questions are:

- What are optimal labor conditions for workers engaged in labor-intensive crop production?
- What are the beliefs and/or perspectives of the agricultural operation that led to the development of optimal conditions?
- What processes or procedures were used to make the conditions optimal?

Qualitative Inquiry

Qualitative research examines “things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them” (Denzin & Lincoln 2011, p. 3). Because qualitative inquiry investigates phenomena as it occurs in context, without manipulation or experimentation, it challenges positivist and post-positivist assumptions that universal truth can be discovered through the application of
the scientific method, without consideration of context (Guba & Lincoln, 1994; Patton, 2002, p. 42). According to Patton (2002), qualitative research is particularly appropriate for exploring phenomena because the methodology enables rich descriptions of human processes, perceptions, and experiences, and is adaptable to the dynamic and fluid ways in which activity unfolds (p. 159).

Qualitative inquiry asserts that multiple and co-constructed realities are formed through the interaction of people, history, and culture (Swanson, Watkins, & Marsick, 1997). Only through analysis of participant words, perspectives, and meaning (Creswell, 2013, p. 47), can researchers begin to “capture, understand, and represent” a phenomenon (Ruona, 2005, p. 234). The qualitative researcher reports first-person accounts, rather than distant or third-person prose where participants are silent and experience is devoid of meaning (Gilgun, 2005). First-hand accounts are particularly important, according to Bogdan and Biklen (2007), because those accounts give voice to “the world from the perspective of those who were seldom listened to—the criminal, the vagrant, the immigrant” (p. 10).

Interpretation is dually influenced by the researcher’s presence in a study (Ruona, 2005; Tufford, 2012, p. 82), and the unique language, available discourse, and history of the researcher that is used to make meaning (Richardson, 1994, p. 518). A qualitative researcher may choose to bracket or epoché—to attempt to set aside or suspend “everyday understandings, judgments, and knowings” to increase a study’s rigor (Moustakas, 1994, p. 33). By becoming aware one’s own values, beliefs, perspectives, prejudices, and other preconceptions, a researcher is better prepared to interpret the experience from a fresh perspective (Tufford, 2012). However, some qualitative
methodologists debate whether human beings have the capacity to suspend judgment entirely. Heidegger went further to suggest bracketing is not desirable if our goal is to fully comprehend the essence of lived experience (Tufford, 2012, p. 82). In this study, bracketing is attempted, while also acknowledging that complete objectivity is impossible.

Qualitative inquiry is the appropriate lens for the study of optimal labor conditions of crop production workers because it allows phenomena to be observed as it occurs in context while capturing the processes in which the conditions are created and maintained. Moreover, although this study will attempt to identify “optimal conditions,” what constitutes “optimal conditions” almost certainly has multiple and subjective meanings depending on whom you ask. Qualitative inquiry in this study is an approach that gives voice to this phenomenon from the perspectives of workers laboring the fields, and also from the agricultural operator who is challenged with keeping the farm afloat. Gaining these multiple understandings will help mitigate the influence that the researcher will have on the findings of the study.

**Case Study Research Design**

Qualitative inquiry’s unique case orientation lends itself as a methodology in situations where the research goal is a rich, detailed, holistic, and contextualized description of a case (Patton, 2002, p. 55). Case study research, according to Merriam (2009), is an “in-depth description and analysis of a bounded system” (p. 40). The usage of the phrase, *case study*, refers to both a unit and method of analysis.
As a Unit of Analysis

Stake (2000) described a case study as “a choice of what is to be studied” (p. 435). According to Stake (1995), we study cases because:

We are interested in them for both their uniqueness and commonality. We seek to understand them. We would like to hear their stories. We may have reservations about some things the people… tell us, just as they will question some of the things we will tell about them. But we enter the scene with a sincere interest in learning how they function in their ordinary pursuits and milieus and with a willingness to put aside many presumptions while we learn. (p. 1)

As a Method of Analysis

Yin (2009) described case study research as “empirical inquiry about a contemporary phenomenon (e.g., a ‘case’), set within its real-world context” (p. 18). Stake (2000) stated that a case study methodology may be either quantitative or qualitative. A qualitative case study methodology is appropriate in instances when: (a) the research question seeks to establish how or why, (b) the researcher is unable to manipulate the behavior under study or control the situation or environment, and (c) the focus of the study is on contemporary events (Yin, 2014, p. 13-14). As a research method, Schramm (1979) described the essence of the case study as illuminating “a decision or set of decisions: why they were taken, how they were implemented, and with what result” (as cited in Yin, 2014, p. 15).

Swanson, Watkins, and Marsick (1997) stated that case study designs are common and useful in the field of HRD. Case study research provides a means to conceptualize the phenomena, while physically bounding the study within an agricultural operation. Moreover, the case study method enables the discovery of how the optimal conditions came into existence, while describing how the operation functions today.
Holistic Single Case Study Design

Yin (2014) asserted that a single case study approach is appropriate in circumstances in which the case is selected because it differs from the anticipated norm in some way (p. 9) and should be considered when a case is “critical, unusual, common, revelatory, or longitudinal” (p. 51). Studies that investigate a single organization or program in its entirety utilize a holistic single case study design (Yin, 2014, p. 55). Since the study’s purpose is the holistic investigation of a single farm operation that fosters optimal labor conditions, the specification a single operation with optimal (or unusually positive) conditions makes a holistic single case design appropriate.

Holistic case study design does have potential limitations, such as less detailed information which may emerge. A more serious risk is that a single a case design is vulnerable to unanticipated organizational or program-wide shifts that may lead to a mismatch between research questions and the evidence that is collected to answer them (Yin, 2014, p. 55). A third potential limitation is that the analysis of a single case can lead to unwarranted generalizations.

Case Selection

Qualitative research uses purposeful sampling to select a case based on its ability to provide insight and the information-rich data needed to answer the research question (Merriam, 2009; Patton, 2002). The goal of the present study was to discover and gain insight into a case where an agricultural operator fosters optimal labor conditions for their workers. Therefore, a criterion-based selection strategy was used to select a research site. In criterion-based sampling, the researcher determines and selects a case on the basis of a
set of attributes that are essential to providing rich information about the phenomenon under examination (Merriam, 2009).

For the purposes of this project, the case is bounded as a single agricultural operation in California that is engaged in growing berries for human consumption. Within the operation, the data which was collected and analyzed for inclusion in this study is restricted to the following parameters:

- Agricultural operations occurring within a single, centralized job site.
- Operators, managers, crew leaders, laborers, and other paid personnel that are engaged in labor-intensive crop production at that location and are over the age of 18.
- Service providers engaged in the health, safety, welfare, or education of paid personnel engaged in labor-intensive crop production, regardless of whether services are provided at the agricultural operation or a nearby location.

The case selection criteria is adapted from a set of industry benchmarks developed by the Equitable Food Initiative (EFI)—a collaborative partnership between businesses and advocacy groups that align “the interests of consumers, retailers, suppliers, and workers” (EFI, 2013a, para. 1). EFI benchmarks focus on three key areas of stewardship: labor, food safety, and environmental. These are the only industry standards that balance diverse stakeholder interests to provide “dignified livelihood for farm workers, a stable and professionally trained agricultural workforce for growers, and safer and more sustainable food for retailers and consumers” (EFI, 2013b, para. 1). While EFI standards are high yet attainable. As of early 2019, EFI-certified farms are located in the United States, Canada, Mexico, and Guatemala.
Although this study is designed with a criterion sampling strategy, an intensity sampling strategy in which “information-rich cases that manifest the phenomenon intensely, but not extremely” could have been employed if a farm meeting all the criteria in the researcher’s region was unavailable (Patton, 2002, p. 243). It should also be noted that in qualitative research, sampling criteria are “usually not wholly prespecified, but can evolve once fieldwork begins” (Miles & Huberman, p. 27).

The EFI standards are extensive with 98 EFI standards in total, and 43 which relate to the goal of this study in particular. The following general criteria are adapted from the EFI standards:

- Compliance with national, state, and local laws relating to labor and food, health, and occupational safety.
- Worker health and safety characterized by: (a) processes to minimize and prevent illness, injury, or death, including from exposure to heat, wind, and pesticides, (b) the provision of adequate safety equipment to workers, (c) access to safe drinking water, sanitary toilets and hand washing facilities, and shaded rest areas at the worksite, and (d) no tolerance for physical, psychological, and verbal abuse.
- Health and safety training.
- Appropriate water and safety standards.
- Labor conditions characterized by labor-management cooperation, fair compensation, fair working conditions, and non-discrimination.

Two additional criteria have been identified by the researcher to meet the purpose established for this study:
• Farming operation is engaged in labor-intensive crop production.

• Operation provides some form of formal or informal developmental opportunities to laborers and other employees beyond the level that is necessary to perform their jobs (EFI, 2013).

Data Collection

Creswell (2013) identified four main types of data that can be collected in qualitative case study research: observations, interviews, documents, and audiovisual materials. Patton (2002) also suggested that several sources of data will strengthen the results of a study. When multiple forms of data are collected, findings may be triangulated, and the resulting conclusions will be more compelling.

Data Collection Period

A berry ranch in California was selected for this study. Data was collected over a three-week period of 120 hours. Twenty interviews were conducted during the fall harvest season. In order to facilitate data collection during periods when farm workers are transitioning into and out of their workdays, data collection began some mornings at 6:00 a.m., and continued up to eleven hours, Monday through Friday. Documents, photographs, and short videos were also collected.

Observation

The primary purpose of observation in qualitative research is to provide factual and first-hand descriptions of events or activities as they unfold in as they occur in context, while recording meanings that can be observed (Patton, 2002). When planned and systematically applied, observation will facilitate the collection of rich data because it: (a) encourages discovery; (b) provides experience within the actual context of the case;
(c) makes things visible that others might overlook; (d) makes visible things people may not talk about; and (e) provides personal knowledge to aid in analysis (Merriam, 2009; Patton, 2002, p. 263-264). Denzin (1978) indicated that “multiple methods of observations must be employed” because different forms of data reveal “different aspects of empirical reality” (p. 28). Just as any method of scientific inquiry, observation requires “disciplined training and rigorous preparation” (Patton, 2002, p. 260). Mowrer (1932):

Facts are not born full bloom to be plucked by anyone. In every perceptive experience there is an infinite number of observations which might be made but which are not. What the individual sees is determined in part, at least, by what he is trained to observe. (As cited in Gilgun, 2005, p. 281)

Depending on a study’s research questions and goals, a researcher may observe in a setting as a full participant, participant observer, nonparticipant observer, or complete observer (Creswell, 2013), and these roles may change over the course of a study (Patton, 2002).

Non-participant observation was initially conducted to familiarize the researcher with the case, its people, and operations in general, and continued throughout the course of the data collection process, although the researcher was also a participant observer on a limited basis. Based on the research questions and theoretical framework, observations focused on: (a) workday routines of agricultural operator, supervisors/crew leaders, support staff, and laborers, (b) workplace activities (e.g., accessing and using safety equipment, meetings, and break activities), (c) setting, characteristics and conditions of buildings, farm, and equipment used, and (d) interpersonal relations and interactions.

The observation process was recorded in field notes, in which the observer strived for accuracy without judgment (Glesne, 2011, p. 73). Descriptive and reflective notes for
events and activities were also record (Creswell, 2013, p. 169). Once an observation is complete, the qualitative researcher is tasked with “articulating the meaning… of the action as the actors themselves would articulate them and as others present to the acts (as second or third persons) would articulate them” (Carspecken, 1996, p. 98).

**Interviews**

Interviews allowed the researcher to gain information that cannot be observed (Patton, 2002, p. 341), and began after one day of observation had been conducted. The interview text may focus on reconstructions of the past, events currently taking place, and projections into the future. Interview data may also contribute to triangulation of other findings or serve as a member check (Lincoln & Guba, 1985, p. 268). The qualitative researcher interviews from the position of deliberate naïveté in order to discover the lived experience of the interviewee and understand and interpret the meaning they give it, complete with nuances, specificity, and ambiguity (Kvale & Brinkmann, 2009).

**Interview type.** Merriam (2009) described interviewing techniques as occurring on a continuum depending on the extent of structuring of questions that is planned. While structured interviews ask predetermined and ordered questions designed to constrain a participant’s answer at the expense of not accessing the interviewee’s perspectives, the benefit is that more questions can be asked, and coding and interpreting can occur quickly (Brewerton & Millward, 2001; Merriam, 2009; Patton, 2002). Unstructured interviews, on the other hand, trade ease of analysis for rich and detailed data that evolves during the course of a non-linear interview process (Brewerton & Millward, 2001; Lincoln & Guba, 1985). Merriam (2009) indicated that unstructured interviewing is desirable in cases when “a researcher does not know enough about [a]
phenomenon to ask relevant questions” or the goal is to “formulate questions for later interviews” (p. 89). Semi-structured interviews are the midpoint between structured and unstructured techniques, and are beneficial because responses can be compared which reduces interviewer effects, they allow for easier analysis than unstructured interviews, and afford greater exploration than structured interviews (Brewerton & Millward, 2001; Patton, 2002). Kvale (1996) described the semi-structured interview as having suggested themes and questions to cover, and the flexibility for adaptation and follow-up as the interviewee’s life world emerges (p. 124). Interviews were predominantly semi-structured with unstructured questions used on a limited basis.

**Interview process.** This study used unstructured interview questions initially upon arriving at the ranch to gather preliminary information about the agricultural operation and labor conditions, and these questions were followed by semi-structured questioning in interviews. The interview process began by greeting participants to put them at ease, informing them of the purpose of the study, and answering any questions they may have (Kvale, 1996). The interviewer strived to use simple and non-technical language to make the interview a comfortable positive interaction (Kvale, 1996), and help the participant to “explore issues with their own vocabulary, their own metaphors, and their own ideas (Carspecken, 1996, p. 154).

Carspecken (1996) encouraged beginning the interview process with questions designed to open discussion on the particular topic the interviewer wishes to investigate (p. 155). For example, an introductory question could ask the participant to describe a little bit about their personal history on the farm. Follow-up could be in the form of additional questions or probing statements designed to uncover underlying beliefs,
values, or feelings (Carspecken, 1996, p. 156). It is important for the researcher to prepare and anticipate the many different directions an interview may take (Carspecken, 1996). The researcher may incorporate “covert categories” (a list of information you would like to gather but will not ask directly) and follow-up questions into their interview guide (Carspecken, 1996).

According to Carspecken (1996), the way in which the interviewer responds to the interviewee is more important than the questions that are asked. Facial expressions and one-word phrases may be used to encourage and establish rapport, and actively listening will help a participant articulate their feelings (Carspecken, 1996). Paraphrasing can be used in three levels of inference: *low*, the interviewer uses their own words to restate the participant’s comment without interpretation; *medium*, the researcher tests their interpretation by speculating on the meaning of the participant’s comments; and *high*, the researcher speculates about things that have not been discussed. The interview process should be concluded with debriefing to attend to the participant’s needs and see if they have any additional information they would like to provide (Kvale, 1996).

**Interview plan.** In order to understand the process in which agricultural operations strive to foster optimal conditions for workers engaged in labor-intensive crop production, semi-structured interviews were conducted with farm operators, senior crew leaders, crew leaders, service providers, and crop workers. Key individuals were interviewed more than once to establish a rapport and engender trust, so the participant would feel more willing to discuss the details of the case. Interviews were recorded and unrecorded depending on the comfort level of the participant. Fifteen interviews required the assistance of a translator. Questions focused on farming operations, management
philosophy, developmental efforts, safety and health programs, interpersonal relationships, and worker perspectives, and questions evolved and were adapted with use. Ultimately, ten field workers, five crew and senior crew leaders, two operators, two advocates, and one clerical worker were interviewed.

**Cross-language research.** As a non-Spanish speaking and outsider researcher, perhaps the most challenging aspect of this study was accessing the first-person perspectives of non-English speaking crop workers. This process may have been dually hindered by the reluctance of foreign-born farm workers to speak with an outsider (Clingerman, 2007), and the unintended influence that a third-party translator can have on the findings and trustworthiness of a study (Squires, 2009). This is a common pitfall of cross-language research.

According to Squires (2009) there are four prime methodological considerations when conducting cross-language research. First, the researcher must employ strategies to ensure *conceptual equivalence*, or assurance that the translation is “a technically and conceptually accurate translated communication of a concept spoken by the study’s participant” (p. 278). Second, in addition to having experience, a translator should be certified by a professional association or, at a minimum, demonstrate certification-level proficiency. Third, the translator and researcher should share a common theoretical or philosophical approach so that an alternative philosophical orientation does not contaminate results. Finally, an external review of the translation should be conducted to validate the accuracy of the translation. In addition to these four key principles, Squires provided the following best practices when conducting cross-language research: hire a professional, use the same translator for all interviews, have an independent translator
validate results, indicate that a translator was used as a limitation of the study, and report the process in which the interviews were translated and transcribed.

The interpreter selected for this study possessed the experience and advance skills necessary to translate in hospital-patient settings and court cases. He further has experience interpreting educational topics for strawberry growers and workers. As the child of farm workers himself, the interpreter shared my sensitivity to farm worker conditions, and belief that they are an oppressed class of workers. The same interpreter was used for all interviews, and an independent translator verified the translations and his work was found to be accurate.

A plan was put into place to interview indigenous workers who do not speak Spanish, in which two or three interpreters may have been necessary. However, no non-Spanish speaking workers were interviewed due to the sampling strategy used, in which workers on break or working along the edge of the fields were approached and invited to participate. It worked out that everyone approached spoke Spanish fluently.

Documents

Field notes were collected throughout the data collection and analysis process to record descriptions and observations, and to enable the researcher to acknowledge and reflect on their “feelings, reactions, hunches, initial interpretations, speculations, and working hypotheses” (Merriam, 2009, p. 131). In addition to field notes, the following forms of documents were collected and analyzed: public records, newspaper articles, training and development materials, images of signage, sketches, photographs, physical materials, non-confidential business records, and researcher-generated documents, such as the researcher’s field and interview notes.
Data Analysis

Qualitative data analysis is “the process of organizing and sorting data in light of increasingly sophisticated judgments and interpretations” (Glesne & Peshkin, 1992, p. 130). An integral requirement for qualitative data analysis is the researcher’s “obligation to monitor and report their own analytical procedures and processes as fully and truthfully as possible” (Patton, 2002, p. 434).

The “case” in case study research provides both the unit of analysis and the product (Patton, 2002). The data analyst’s “first and foremost responsibility consists of doing justice to [the] individual case” (Patton, 2002, p. 449). Ruona (2005) wrote that “case study analysis can be overwhelming… because its purpose is to identify, sort through, and pattern relationships, dynamics, or other phenomenon of interest within a bounded system” (p. 341).

Data Analysis Process

Digital interviews were saved on the researcher’s personal password-protected laptop. Interpreter-aided interview recordings were further uploaded to a secure file-sharing platform for third-party verification of the accuracy of the interpretation. A copy of their attestation to the accuracy of the interpretation was received and is on file. The interviews were transcribed to a Microsoft Excel spreadsheet, where observation and handwritten interview notes were also saved. Notebooks and other written artifacts collected from the research site are stored at the researcher’s home.

Each transcription began with a summary of interview/observation attributes to aid in data management, and included information such as the location being observed, or interviewee’s first name, position, and work history. Larger passages of data were
broken into multiple rows of data which could more easily be coded and categorized during analysis.

The first steps in data analysis was to familiarize myself and begin to “play” with the data in order to gain a sense for “promising patterns, insights, or concepts” (Yin, 2018, p. 296). I began this process by comparing answers to key questions across participants. Another strategy used was to compare data from select employees. Notes and analytic memos were taken during data analysis to record and reflect emerging ideas, theories, themes, or questions about the data.

Once I was familiar with the data, I began to review the data line-by-line for potentially meaningful segments of data or “codable moments” (Ruona, 2005, p. 237). Codes are a “tag or label for assigning units of meaning” applied to information collected during the study (Miles & Huberman, 1994, p. 56), and are “most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute” to the datum (Saldana, 2016, p. 9). A good code has: a label, a definition, a descriptive rationale for when a segment of text should or should not be included in the code, and positive and negative examples to avoid confusion (Ruona, 2005, p. 241). As the researcher codes the data, a list of codes is maintained, and the researcher will occasionally step back to examine the code list and consolidate and eliminate redundant codes to maintain a manageable list of possible codes.

Multiple types of coding methods (including subcodes and simultaneous codes) were employed (Saldana, 2016) to codable moments. In Vivo codes were applied to meaningful words or short phrases—oftentimes images, symbols, or metaphors—used by the participant which can enrichen the development of themes. Process codes were used
to record activities or processes using gerunds. An example of a process code used is “protecting myself from harassment.” Value codes were applied to highlight the participants values, attitudes, and beliefs. It was important during coding to remain open to revising codes as analysis deepens.

Once the first cycle of coding concluded, codes were assessed, refined, recoded, merged, or eliminated (Saldana, 2016, p. 323). The goal of second cycle coding is “to develop a sense of categorical, thematic, conceptual, and/or theoretical organization from your array of first cycle codes” (p. 323). Coded datum was grouped, rearranged, and linked until patterns, categories, and themes begin to emerge (Saldana, 2016), and information could ultimately be synthesized.

Merriam (1998) stated that “our analysis and interpretation—our study’s findings—will reflect the constructs, concepts, language, models, and theories that structured the study in the first place” (p. 48). Indeed, the final stages of data analysis yielded themes that corresponded with the research questions and theoretical framework. The initial findings became the basis for the first draft of the study findings. During the writing process, the researcher further analyzed and refined information that emerged from data analysis. This draft was shared with the dissertation committee co-chairs who provided feedback. The chapter was revised and further developed based on this feedback and the author’s own analysis. The next draft that emerged began with a vignette of a powerful experience had during data collection and exemplified the characteristics of the farm under study. It continued with participant descriptions of working conditions of other agricultural operations and a background of the operation under study as context and basis for understanding the findings which were organized
according to the theoretical framework. The chapter continues by linking the findings to strengths-based change techniques and concludes with a chapter summary.

**Ethical Considerations**

Care was exercised to ensure that participants in this study were protected from potential harm, and to ensure that the benefits of participation outweighed the risks. This was particularly important given the vulnerability and marginalized status of the population under study. Therefore, it was necessary to understand and demonstrate cultural competence to minimize potential harm to farm workers from participating in the study. Kim-Godwin, Alexander, Felton, Mackey, and Kasakoff (2006) recommended that researchers interested in working with farm workers understand the differences between Western and Mexican cultures, and that caring can transcend cultural differences. This includes being non-judgmental and patient when communicating with workers, and demonstrating respect, awareness, trust, and willingness to learn about a client’s culture or beliefs.

The specific selection criteria chosen for this study was intended to minimize risk to participants by selecting an agricultural operation with amicable employer-employee relations, positive working conditions, compliance with labor law, and workers aged 18 and over. This ensured that employees were more able to express themselves freely without fear. Aliases were used for all participants, and position titles were modified to represent the appropriate level within the organization, while keeping titles generic enough that the participant could not likely be identified. Furthermore, care was exercised to limit potentially identifying information about the operation, where possible.
The study proposal was developed prior to locating a site. Once it was identified and agreement to participate was secured, the researcher applied for and received approval to conduct the study from the university’s Institutional Review Board (IRB). Upon the recommendation of the IRB chair, an unsigned consent form was developed. This document notified participants of the nature of the study, that their participation was voluntary and could be ended at any time, that the information provided is confidential, and their identity would not be disclosed if the study is published. This form was translated into Spanish and back into English by a translator and the accuracy of this work was verified by a third-party.

**Trustworthiness of Findings**

While qualitative findings may not be considered objective, they can be found credible (Merriam, 2009, p. 215). To this end, multiple methods of data collection (interview, observation, and documents) and multiple sources of data were used. Findings were considered triangulated when evidence from three methods or data sources converged and/or corroborate one another (Merriam, 2009; Yin, 2018).

To aid in ensuring validity, peer debriefing sessions were employed. In one session, an early review of coding efforts was conducted with the dissertation co-chairs. Later, a colleague reviewed my decision-making process in two areas where I most felt vulnerable to bias to ensure my conclusions were valid. I also received thought-provoking and challenging feedback from the co-chairs on my manuscripts.

Another quality control measure is to conduct member checks where members verify the accuracy of the information they provided. While conducting interpreter-aided interviews, efforts were taken to ensure an accurate understanding of the participant’s
statements. The accuracy of these statements and interpretation was verified by a third-party. However, given the highly vulnerable population under study, and low levels of English and literacy, it was decided that member checks of the findings would not be conducted.

**Researcher Perspective**

Since “there are no objective observations, only observations that are socially situated in the world” (Denzin & Lincoln, 2011), qualitative researchers may choose to report their position or subjectivity to the reader (p. 12). This process enables the reader to evaluate how the researcher’s “values and expectations influence[d] the conduct and conclusion of the study” (Maxwell, 2005, p. 108). Here is mine.

**Coming Home**

On a cross-country road trip in 1993, I made an unannounced visit to the small farm my grandparents once owned. Midway down the long gravel driveway a rusty pale blue tire-less school bus had long been planted in my grandmother’s berry garden. The house’s olive-green aluminum siding was rusted from the farming equipment laid against it. Immediately cognizant and embarrassed by my trespass, I noticed three or four men scurry into the long, leaning, and dilapidated century-old barn. As I approached to introduce myself, a partial view into the barn’s interior was facilitated by a door that was off its tracks and interior which was partially illuminated by sunlight through small windows and countless specks of light that shined through stray bullet holes left by hunters. The men peered at me from inside, with a facial expression of fear. The cognitive dissonance of the moment was deafening, and the situation could neither interpret nor comprehend. I was “home,” yet without habitus. Many years later, I shared
the story with a childhood friend and life-long resident of the community. She said she was unaware that any Latino farm workers worked or lived in the area. Later, I shared the experience with a farm worker advocate I met, and his work had led him to the very same area. Revisiting my grandparent’s family farm would later ignite an interest in the hidden and oppressive labor practices that we live among and benefit from, but that never register in our collective consciousness.

In the interest of transparency, I would like to acknowledge that while in construction, I witnessed the marginalization of immigrant coworkers first-hand. I support legislation that would offer unauthorized workers a path to citizenship. From my perspective, the larger issue, and the reason why I pursue this inquiry, is moral rather than legal—it is the potential for workers to be exploited, abused, and even die from this work, and the belief that workers who come here with nothing and perform the most undesirable tasks that serve our society greatly should be afforded a chance at the American dream.

The conditions observed at the family farm and discrimination observed in my career is akin to what Holmes (2013) found in agriculture—that operations tend to be structured in a racial and ethnic hierarchy that placed undocumented Mexican laborers in the lowest and most dangerous positions. Despite the privilege of my education, class, and skin color, as a woman, I too was oppressed under this hierarchy. In addition to having to continually prove my competency as a construction manager due to my gender, I also contended with things like trying to file criminal charges against a former employee who threatened to kill me for firing him. While several witnesses verified my
account, ultimately, they also blamed me for the incident because I “got his dander up,” and “It’s inappropriate for a woman to fire a man.”

In my next professional position working in the corporate office of a large construction and manufacturing company, it was single mothers that worked at the bottom of the hierarchy and were referred to using the dismissive and derogatory term “girl.” Women were ordered to clean and get coffee simply because they were female and forced to listen to misogynist banter throughout the day. As the human resource manager, I was the “chick” tasked to investigate sexual harassment and hostile work environment accusations.

In conclusion, my interest in this topic was initially sparked by the inhumane living conditions observed on the small farm my family once owned, and subsequent indignation at the general absence of societal awareness (myself included) of the working conditions endured by agricultural labor. My interest in labor force diversity and in vulnerable workers in particular, grew after observing a racial, ethnic, and gender hierarchy in the construction industry that exploited undocumented laborers and simultaneously privileged and oppressed me at the same time. Although I managed millions of dollars in construction and was a human resource manager for more than a thousand employees at a time, my proudest professional accomplishments were in the areas of employee benefits and health and safety. It was this passion for employee welfare that drew me to HRD, and my personal interest in vulnerable employee groups combined with our field’s twin focus on humanistic and performance goals that brought me to this line of inquiry.
Philosophic Assumptions

My dissertation topic interest is consistent with a critical ontology, in that I believe that individuals are either privileged or disadvantaged on the basis of characteristics such as class, gender, racial, and citizenship status. We see this play out in the case of farm workers who have been systematically excluded from labor protections. Epistemological evidence of this struggle can be found in empirical studies that explore the disproportionately high rates of work-related sickness and injury among Hispanic farm workers coupled with the unusually low rates of safety training, and lack of enforcement of legislation to protect worker health and safety (Arcury et al., 2012; Holmes, 2006; Holmes, 2013). This process benefits the growers with lower labor costs, consumers with lower food prices, and corporations with higher revenues—while compromising worker welfare.

Organizations often provide a context for inequity to be created, reinforced, perpetuated, and challenged (Scully & Segal, 2002). A critical or humanistic pedagogy can be at odds with the HRD practitioner’s primary responsibility of advancing the employee performance and development needs of a sponsor’s workforce (Swanson & Holton, 2009). Meyerson and Scully (1995) suggested that tempered radicals—individuals who are committed to both their organization and a cause—can use their insider access to act as both critics and advocates for the status quo and tempered radical change (p. 586). Having found in my own career that conflict is an ineffective tool to change the status quo from within an organization, I have come to see tremendous wisdom in working from inside a system to achieve small, strategic, and incremental change. I reconcile the tension between my critical inclinations, pragmatism, and sense
of professional responsibility, with my personal ethic to *do no harm*, by which I mean a personal commitment to using change techniques that draw on strengths and do not cause those whose actions I hope to influence to feel pain, shame, guilt, or embarrassment.

**Chapter Summary**

The goal of this holistic single case study is to understand the process through which a single agricultural operation fosters optimal conditions for crop workers. Qualitative inquiry is deemed by the researcher as an appropriate methodology for the study because it allows phenomena to be observed as it occurs in context while capturing the processes in which the conditions are created and maintained. A case study approach was selected because it will allow for in-depth analysis of a bounded system (Merriam, 2009, p. 40), and is appropriate in circumstances in which the case is selected because it differs from the anticipated norm in some way (Yin, 2014, p. 9). Since the case for this research study is a single farm operation that fosters optimal labor conditions, the unusually positive conditions make a holistic single case design appropriate.

The selection criteria are adapted from a set of industry benchmarks and additional criteria specified by the researcher. This study is designed with a criterion sampling strategy to examine an extreme case of the phenomena, and a planned intensity strategy had an operation exhibiting an extreme manifestation of the phenomena not been found. Data collection was conducted over a three-week period, and observations, interviews, and documents were collected and analyzed.
CHAPTER IV

ELECTION DAY

The November wind winnowed through the wallboards of the old barn and through the fractured plastic sheeting once hung as a barricade. One of the first meeting attendees to arrive was a female strawberry picker. Her brown eyes filled the space between the ball-cap visor and the modest pink bandanas that shielded her face and hair from the sun and pesticides, and perhaps unwanted male attention. Maggie, the manager, mentioned that the president of the Equitable Food Initiative will tour the location on Friday with a philanthropist interested in social responsibility and working conditions in agriculture. Maggie engaged in small talk and laughter with a crew leader and others while waiting for the remaining team members to arrive. While a few workers seemed frustrated, there appeared to be clear comfort among all attendees—marked by people leaning into conversation with one another, and others who seemed more relaxed, and leaned leisurely backwards in their folding-steel and white-plastic chairs while conversing. The attendees sat in the approximate configuration of a fish hook—a half circle with bit of a tail—as if the chairs had once been in a circle meetings before.

The Meeting of the Process Improvement Team

The meeting of the Cardinal Ranch’s Process Improvement Team (or EFI Leadership Team) was called to order with 15 members present. Minutes and attendance were taken by a worker on a clipboard. Two other attendees took notes. The team included "representatives of management and workers in non-management positions.
Worker representatives [were] selected by workers to represent all job categories, gender, and specific demographic interests, including indigenous and disabled workers” (EFI, 2017, p. 1).

A female strawberry picker, one of three female fieldworkers in attendance, voiced her concern over being asked to pick a third variety of strawberry, called “gems” due to their small size, in addition to the two kinds of strawberries that they already pick for retail and juice markets. Pickers harvest the varieties simultaneously, and sort them in their carts, either by placing them into plastic pails, or packaging them into flats of clamshells destined for the produce isle. Pickers felt they should be compensated at a higher rate for picking three varieties rather than two, and a meeting of the Process Improvement Team was called to see if a solution could be found.

As a representative body, not everyone in attendance was affected by the issue. Nevertheless, the group actively listened, asked questions, nodded to indicate understanding, and virtually everyone contributed meaningfully to the discussion, regardless of age, gender, ethnicity, or position. Workers helped others to understand what was said, which perhaps may have been attributable to differences in language and dialect among attendees. At moments, the team seemed so engrossed in discussion and in consideration of the matter at hand that it was almost as if the manager was not in the room. She stood leaning against the whiteboard, marker in hand, listening and contributing and writing concepts in Spanish and numbers on the board.

The first suggestion was to make it easier to pack gems by packing pints instead of two-pound containers, which could work better given the design of the carts. The second was increasing the piecework rate, a prospect which drew additional interest from
almost everyone in the room, as noted by their smiles—presumably because such a change had the potential to increase wages for the larger workforce at the site, rather than just the affected pickers. As the resolution process continued, the energy shifted from restlessness to excitement. Much to my surprise, the consensus reached was that the best solution for everyone was not to pick gems at all. A feeling of satisfaction and relief came over the room. The team seemed happy.

**What Just Happened?**

The meeting was in Spanish and the interpreter could not attend because the meeting was called without prior notice. What I came to understand from conversations with Maggie and other attendees was that the company did not foresee that picking three types of strawberries would create a problem for workers, when they were in essence asking workers with two hands—highly adept, skilled, and fast hands, granted—to switch from picking two varieties to three at a time. Not only did this throw off their system and picking rhythm developed with extensive practice, it threatened their production rate and potential piecework earnings, and their carts were not currently setup for picking three types of fruit which exacerbated the issue. Furthermore, the order for gems was likely accepted by a sales office several hours away, and by people who did not realize there were not enough gems on the plants to fill the customer orders in the first place.

Without such a problem resolution mechanism in place, workers may have been afraid to voice their opinions and could have remained disgruntled with the situation. Similarly, the business may have increased pay to compensate workers for the increased work, ordered new carts, and/or extended commitments to pick berries that were not available to be picked. It is because of this organization’s commitment to its workers and
recognition of their expertise that the organization averted making several potential mistakes. The affected employees were happy to return to picking two types of berries, as usual, and the team was satisfied to reach an outcome that was best for their co-workers and the ranch. The ranch manager was confident the best business decision had been reached. It was a win-win for all involved.

**Researcher Debrief**

The fact that this meeting took place on November 3, 2015, Election Day in my home state, was not lost on me, nor was the contrast between the extraordinary consensus-building observed that day with the historically low voter turnout and apathy at home. While employees reached 100% agreement rather than cast ballots, the sense of duty and civic responsibility to their peers and the organization was palpable. I returned to my rental car at an utter loss for words. A considerable amount of preparation for this study went to understanding the many marginalizing factors oppressing this highly vulnerable population. Yet nothing—nothing—could have prepared me to see such empowerment. I cried.

**“Every Dog for Themselves”**

Past experiences provide a frame of reference to understand and describe the present. In interviews, participants often brought up the poor working conditions and treatment at other ranches. Abigail, who worked as a labor union organizer prior to becoming a farm worker trainer, described the conditions at most other ranches as “every dog for themselves.” Bosses, she said, would reprimand or chastise workers for speaking, so much so that workers would remain silent when there was a problem. The prevailing culture is “shut up,” and “don’t contribute anything,” she said, so workers stay
silent just to get by. Gerardo, a picker, said the foreman will be harsher with you or you will be fired if you speak up. This reluctance to speak is not only problematic for workers themselves, it can also be problematic for food safety. For instance, if a worker is afraid to speak up when an area is contaminated by animal feces, the product could be tainted with E. coli (Beecher, 2017).

Part of the pressure on workers to pick quickly is because the fruit is highly perishable, and if it is not picked when it is ready, it could begin to rot. Many ranches set quotas for how many boxes must be picked, but Cardinal does not. Diego, a picker said that they will fire you if you don’t meet the quota, so you don’t work. Other times you can’t meet the quota because there is not enough fruit, but they demand you pick three to four boxes per hour anyway. Based on the box sizes observed, picking three or four boxes per hour would mean picking between 480 and 640 pounds of strawberries per 10-hour day, which is difficult to imagine on its own, let alone without sufficient strawberries to do so.

Angel, a crew leader, said it is the foreman’s job on other ranches to pressure workers. They watch workers closely, Santiago, a senior crew leader said. When Angel first started picking, his boss said he would be paid half because he was picking with one hand and not two, when the reason he used one hand was because he was new and using two hands is a skill that takes time and practice to develop. There is also pressure on new workers to keep up with crews even though they do not have the skills to do so. William, a farm worker advocate, described his father’s first day trying to pick, “he couldn't keep up” so “the crew left him” behind in the field.
Santiago said that bathrooms at other ranches can be dirty and difficult to use. In addition to having dirty bathrooms that may not get cleaned for days, some ranches do not have supplies, like water, toilet paper, soap, or gloves. Others may have no restrooms at all, Rafael, a picker said. This is a condition that not only threatens the health and safety of workers, it affects the health and safety of consumers, too.

Based on these accounts, workers came to view the dominant culture on other ranches as one where workers are frequently degraded, dehumanized, and subjected to the whims and demands of abusive and inhumane supervisors, locking them into a constant struggle for financial, physical, and spiritual survival. Moreover, these supervisorial practices prioritized the quantity of strawberries produced over the quality, placing food safety at risk in favor of short-term revenue.

According to Holmes (2013), such mistreatment occurs often and is attributable to the indelible link between discrimination based on national origin, immigration status, and indigenous ethnicity and the arduous nature of manual harvesting work. Specifically:

In general in U.S. agriculture, the more Mexican and the more “indigenous” one is perceived to be, the more psychologically stressful, physically strenuous, and dangerous one’s job… Thus where a migrant body falls on the dual ethnic-labor hierarchy shapes how much and what kind of suffering must be endured. The farther down the ladder... the more degrading the treatment by supervisors, the more physically taxing the work, the more exposure to the weather and pesticides… Strawberry pickers are at risk for heart disease and many cancers but worry most about pesticide poisoning, musculoskeletal injury, and chronic pain.

This case is an exception to this pattern of mistreatment and abuse, and further evidences that such mistreatment of workers can be counterproductive for the interests of the ranch, vendor, and the consumer.
“A Model for All Other Ranches”

Compared to other ranches, Fernando, a crew leader, called Cardinal Ranch “a model for other ranches.” He said, “This type of work here, we feel like a family. It should be like this everywhere… They give you hours and good treatment.” Cardinal was not always this way. Steve, an owner, said that for 20 years the ranch operated using the conventional agricultural management structure where one leader made all the decisions and other opinions were not valued. However, Steve said that having a model that devalued workers was not sustainable in an industry that is facing a long-term labor shortage due to improved economic opportunities in Mexico, tougher border control, and an aging workforce. Furthermore, Steve said that it is better to work with stakeholders than against them. This is a lesson he learned when a prior business venture failed after unionization.

Maggie, the ranch manager, said it was one of their largest customers that approached Cardinal initially about becoming a part of EFI, and it seemed like a natural fit philosophically given the ranch’s evolving management style, and their commitment to labor, food and pesticide safety, and social responsibility. The transition was not easy, Steve said. It came at a high cost because they had to replace managers who were resistant to change in favor of leaders that have a high level of risk tolerance, an interest in collaboration, and who will value employee ideas, opinions, and expertise. It also meant collaborating with other EFI board members, like the United Farm Workers Union, who Steve once viewed as a threat to the ranch’s survival.

A key component of the new business model, and also an impetus for adapting it, is that the ranch wants to be an “employer of choice” to attract and retain workers by
creating intellectual and financial opportunities for all stakeholders. By being the employer of choice, the ranch hoped to build a skilled and professional workforce and maintain a stable labor supply to sustain its needs until manual harvesting is replaced by mechanization. As part of this effort, Cardinal offered workers: improved wages, better training, treatment, and working conditions, and employment that is more stable and reliable for more weeks of the year.

However, being an employer of choice is not sufficient alone to meet peak labor demand during the six-week period in which three-fourths of the crop is picked. While temporary foreign workers may be hired through the H-2A visa program, the ranch uses H-2A workers as a last resort due to associated program requirements and compliance costs that make H-2A labor 40% to 50% more expensive than domestic labor. This incentivizes the ranch to experiment with other strategies to meet their short-term labor needs that are less costly than using H-2A workers. One such strategy is to employ greater crop diversification to offer more year-around employment. For instance, at the time of data collection, the ranch was experimenting with growing blueberries in the hopes that, if successful, it could provide core employees with more weeks of work each year.

Another strategy is to transport workers between ranches, where possible, to meet the short-term labor needs during the peak harvest season. When Cardinal’s growing season slows down, a portion of their workers are transported daily to a ranch two-and-a-half hours away. This provides workers with 14 weeks of additional work each year, and the other ranch gains the workers it needs during their critical peak harvest season. The busing program is not cheap, particularly since employees are compensated for the for
four-to-five hours of travel time each day, but it is less expensive than the H-2A program. It is also good for families with children because it reduces the need to be uprooted to follow the crop which is common in agriculture. When the ranch must use H-2A workers, they bring their own workers from a ranch in Mexico with shared ownership so that the money spent is an investment in their own workers, and it allows them to avoid contact with labor contractors, who can be abusive, unethical, and exploit workers.

At the time of data collection, Cardinal was pursuing further cultural change with the goal, Steve said, of everyone becoming the “best version of [them]selves.” This includes positioning all non-temporary workers, so they have the opportunity to “jump to the next level,” he said. In addition to striving to be the best they can be, and providing meaningful opportunities for success, Steve wants to continue to develop leaders that support, coach, cheer, and foster success for everyone. “These cannot be things you write on a piece of paper to feel good,” Steve said. “They must be actionable.”

Cardinal’s desire to innovate and resist the old way of doing things includes striving to build a culture where employees set measurable goals, supervisors encourage feedback from employees, and the ranch is transparent about its performance. This is bolstered by Maggie and Steve’s efforts to model the workplace behaviors that they would like to see, including showing respect, following through with commitments, and holding themselves accountable. The transparency they share with employees includes financial data so that workers are aware of how the business is performing. For instance, when employees know that the ranch is not producing a profit, they understand more when adjustments in hours or purchasing need to be made. Similarly, an EFI principle is that when the ranch is doing well, employees should share in those gains.
In addition to having a ranch manager onsite, the ranch shares a food safety manager, human resource manager, and human relations specialist with two other ranches with common ownership. The ranch manager is supported on site by a human resource clerk, and three senior crew leaders responsible for irrigation, strawberries, and caneberries and machinery.

The following section provides an overview of factors making conditions optimal according to Herzberg’s motivation-hygiene theory. In some cases there may be overlap between hygiene and motivator factors. In these instances, the information is separated between factors.

**Motivation**

Motivators include recognition and achievement, advancement and growth, responsibility, and work itself.

**Recognition and Achievement**

Employee recognition occurs when an employee or group of employees is acknowledged or praised either by internal or external stakeholders, including the general public. A primary example of the recognition employees receive is the feedback they receive from customers. Workers at Cardinal say they are happy to hear from them. According to Angel, *it makes us happy when we get emails about the quality of our fruit, and [they say] it has the best quality with [the] best taste. Workers are happy. Customers are happy. We get pictures of happy children eating our fruit.*

Cardinal opens the ranch periodically for public occasions, like the county farm day, and also to policy makers, and others interested in socially responsible agriculture. Upon visiting the ranch in 2016, U.S. Secretary of Labor, Thomas E. Perez Observed:
Organizations like the Equitable Food Initiative understand that partnerships are important to forging win-win solutions to common problems, like labor standards and food safety... I was heartened to see firsthand how this partnership of unions, consumer groups, growers and buyers is working to invest in their workers and create shared prosperity. They reject the false choice that says you can either create value for shareholders or treat workers with dignity—they know they can and must do both. Every day, EFI proves that you can turn a profit by amplifying rather than undermining worker voice. (EFI, 2016)

A second type of recognition is the hourly bonus workers receive from an EFI-affiliated retailer for their involvement in EFI and for picking good and clean fruit. Although compensation is typically considered a hygiene factor, it is categorized as a motivator because it is given in recognition of employee involvement in EFI and the critical role employees have in ensuring the safety of Cardinal’s products, rather than as an incentive for individuals achieving any particular performance metric. The bonus is distributed equally among workers as an increase to their hourly rate, rather than as an increase on the piecework rate, signifying the importance of focusing on quality and food safety over speed. As Antonia, a picker said, *Now we get bonus. The bonus motivates. It’s a little extra.* Perhaps part of the reason the bonus may motivate employees that given the seasonality of the work, workers may not be able to control the number of hours they work or the volume of strawberries available on the plants to be picked, but what they can do to ensure wages are a little higher is consistently produce good, clean, safe product for the consumer.

Achievement is seeing the results of what one has accomplished. Angel, a crew leader, had a certain smile and gleam in his eye when he spoke of being a champion picker. Although the number of boxes picked also indicates one’s piecework earnings, the total number of boxes may carry significance beyond this for workers. When asked if workers are in competition with one another to see who can pick the most fruit, which
would be contrary to the team atmosphere fostered at the ranch, Gabby, a strawberry picker, said no. Picking a good number of boxes, she said, means that you’re good at your job, and *not giving up... makes you a champion.* It appears there is no universal agreement on the ranch of how many boxes one needs to pick to be a champion.² Gabby talked of champions picking 60 or 90 boxes a day. A crew leader said he was a champion because he picked 125. Maggie mentioned a champion that picked more than 160 boxes a day and earned $80,000 a year.

A second type of achievement found is pickers having achieved status as experts in their jobs. Angel said he *never had a complaint of bad fruit, weight, green, anything.* *Never.* Experienced pickers like Antonia find satisfaction when supervisors do not check weight or quality of what she picked, as she has demonstrated that she is a professional capable of meeting the high health and safety standards without supervision. Maggie also spoke of formalizing this type of practice by providing core employees with training and certification to attest to their ability to perform quality control tasks without monitoring. This would lessen the need for product inspectors in the fields and allow the ranch to save money as the result of fewer rejections. The savings would allow Cardinal to pay certified employees more so they can *invest in those employees [so] hopefully they’ll come back,* Maggie said.

**Advancement and Growth**

Advancement is the opportunity to move upward in one’s position or rank in an organization. Steve said they are working on developing a culture where all non-

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² Some variation in the number of boxes picked provided in these examples could be attributable to differences in conditions in the fields and harvesting method utilized.
temporary employees have the opportunity to advance to the next level, and to position people in the right place to succeed. It has not always been this way.

Santiago, a crew leader and long-term employee, said that consistent with the agricultural industry’s long history of nepotism, “years back, the people who got ahead [at the ranch] were friends and family of [the managers] here.” Maggie said this is something they have continually had to fight against. Several employees attested that there is no longer nepotism or favoritism at the ranch. Santiago stated:

If there is a job, for example, that’s in administration or any job in the company, it is something that becomes public knowledge, and everyone is told about it. And everyone working in the company, all personnel they can apply for a job that is open.

He added the processes have become fairer in the last two years. The change aligns with the transition away from the old way of doing things where one leader made all the decisions and other opinions were not valued, to the new system where employees participate in decision making.

Growth is the opportunity to develop one’s knowledge, skills, or abilities. Any discussion of training or development opportunities at Cardinal Ranch would be remiss without stating that workers in this study were likely raised in poverty, stopped attending school as children, and may have never been given the opportunity to learn to communicate effectively or work constructively with others in the workplace. While educational attainment statistics from the National Agriculture Workers Survey (2016) indicated that Californian agriculture employees have about seven years of education, Maggie estimates that Cardinal workers likely have a fourth-grade education, on average, which is the primary education available to children in Mexico for free. I met one worker who said he never attended school.
Most workers did not come to the ranch knowing how to contribute or collaborate meaningfully in the workplace and undergo training to develop those skills. Furthermore, there are years of conditioning to view agriculture work—and their place in it—in a negative way that must be undone through training. Instead of hearing, “Shut up and do what you’re told, I am the boss,” as Abigail recounted happens at other ranches, the boss now says, “You are the expert on this, and I’d like to hear what you think.” Steve recalled:

I remember one time… this was in one of our [other] operations where we have EFI as well, there was a really old man… we invited them to be part of the leadership team and he said, “You know, I'm 75 years old and I've [picked] my entire career and I really just don't know why I'm here?” And we said, “How long did you say you've been doing this?” And he said, “I've been doing it 35 years.” And we said, “That's exactly the reason why you're here… you're a leader, you have the, you have experience and we need your input.

The experience of finally being valued and appreciated for the expertise they gained throughout their careers has been transformational. Steve continued:

And the smiles that this man put forth, it was unbelievable. It was. You just, you could see it opened up, it opened up something in his mind... In other words, what he was saying is, nobody's ever done this. Nobody's ever asked me for my opinion. Nobody's ever asked me for my input. It's just, it's so foreign to me, and so you know that that's happened across the board everywhere and you really had to work hard to try to teach people how to provide input that. We need your information. We need the information that's in your head, and that's been a process. It didn't just happen by opening up a door and getting everybody down and say, okay, tell us what we need to do. It doesn't work like that. You know, you. You've got to really work hard at it.

Cardinal is working hard to grow interpersonal and leadership skills, constructive workplace behaviors, enhance food and workplace safety, and to help workers grow in their careers through four types of training: (a) training to participate in and be certified by EFI, (b) periodic and annual training and development to grow Cardinal’s unique culture, (c) monthly training for food and employee health and safety, and (d) informal
educational opportunities. Virtually all employees receive training, and in instances where only crew leaders or Process Improvement Team members participate, they bring this information back to their crews.

**EFI trainings.** What is remarkable about EFI is that it gives voice and a seat at the table to employees who were made to stay silent for so long at other ranches. EFI provides a wide array of training and development programs to help build communication skills, such as conflict resolution, teamwork, and body language. They also teach workers to make decisions based on consensus rather than majority rule. Abigail said:

> With consensus they learn to listen without judging and they come together as a group and decide to go for it 100% even if they don't completely agree. Peer pressure helps them come to agreement, so they support issues. It cuts down on the grievances afterward.

Forty hours of training is required for certification, and training continues thereafter on an as needed basis. Trainings may be offered in as many as three languages so that all participants understand what is being taught. EFI requires that training participants be 50%/50% male and female.

**Leadership Academy.** The leadership academy is a two- or three-day training offered every December by Cardinal Ranch to the leadership and Process Improvement Team members. Since the training is organized by the operation, they are in control of the content and delivery; however, much of it builds on the prior EFI training. The purpose of the Leadership Academy is to develop the ranch’s unique culture of “shared knowledge, shared goals, and mutual respect,” Maggie said. Last year, Fernando, a crew leader, said he learned how to treat others and to speak properly.

At the time of data collection, Maggie and Steve were planning the upcoming academy and were soliciting ideas and input from crew leaders on training topics that
should be covered. Steve wanted to see frontline leaders be able to articulate “who we are” as an organization. Other topics which were being considered were: accountability, bullying, skin-color discrimination, changing demographics and inclusivity, and strategies to build a smaller and more permanent workforce.

Another idea mentioned during planning as a possible topic for the training was the discipline policy. Specifically, what should and should not be written up would be discussed. For instance, employees should be written up for using profanities as they are a sign of disrespect for their co-workers. However, rather than disciplining employees for missed work, which cannot always be avoided, a role play was suggested to teach crew leaders how to brainstorm and work with employees to find solutions to the problem that caused them to miss work so that future absences can be minimized.

**Safety training.** Safety training is provided on a monthly basis. The training consists primarily of 30-minute “Tailgate Training,” module required by OSHA. When Angel was asked about the training he receives, he smiled and replied, “That’s what I like. We have training to do things properly.” He continued to provide the example of having an exercise therapist provide training on how to do the required stretches properly each day before starting work. Fernando said that the training has made him 100% aware of the safety risks on the ranch, and that safety is a priority for EFI and Cardinal.

Virtually all workers interviewed said they were aware of the safety risks, with many listing the hazards they have to look out for on a daily basis, including to avoid trips and falls, which are the most common type of injury. Gabby, a strawberry picker, was quick to recount the detailed procedure for handwashing as well as the frequency in which handwashing is required. The safety program appears to be working as evidenced by
their OSHA Recordable Incident Rate. Maggie said it is approximately 4.2 recordable incidents compared to 5.7 which is the industry average.

**A note on delivering safety training.** Maggie said that it is helpful when developing and facilitating trainings to remember that sitting and learning may not come naturally to workers due to limited education. EFI trainings lessen resistance because they “ask them to do dramas and act things out. It tears down the walls. We use a lot of ice breakers,” Abigail said.

However, these strategies do not usually transfer as well to safety training as they do to communication or leadership training. Maggie said that it is helpful when developing and facilitating trainings to remember that sitting and learning may not come naturally to workers due to limited education. She is interested in finding ways to make the trainings more engaging, because many employees do not always pay attention and sometimes seem bored. She gave a training given by the California Strawberry Commission on pesticide exposure and handwashing as an example of the type of entertaining training activity she would like to see more of:

They have like an adult cutout and you put like where the pesticide risks areas are and obviously the biggest one is your genitals. So it's like this big show, right? Because it's like wash your hands before you go to the bathroom because if you touch your genitals and you’re getting pesticides on them, you know, and, and that's engaging because it's funny and it's awkward and you know, and then people are like, oh geez, I don't want to ruin my reproductive system.

She hopes with more creativity that they can combat some of the perceived boredom while also conveying the most important information effectively.

**Informal growth opportunities.** Several workers complimented Steve’s willingness to work with employees informally and on an individual basis to help them grow and further their education. Pablo, a senior crew leader, said that Steve will pay the
$25 for workers to attend English classes. Nicolás said that Steve is always looking for ways to help employees grow, and that Steve offered to pay for job-related training for him. Steve’s eagerness to help employees grow is something Rosa also mentioned and said that she appreciates. While this is meaningful for the employees that he knows and has a relationship with, the lack of formalization as a benefit and limited contact with workers means that not everyone is able to receive assistance, and the organization does not invest to offer this benefit to everyone.

Training outcomes. Multiple workers said the things they learn are beneficial to their personal and family lives. Eva, a picker, said they learn how to treat others with dignity, and the communication skills can be used with their children. Angel said he’s found the trainings helpful at home. Linda, an hourly worker, said, “Training is good. We also talk of discrimination. Also of sexual harassment.... I think training is good, so you know how to look out for yourself. [It] gives you security.”

Abigail said that when workers have this training, they “begin to flower,” as they develop interpersonal skills, and they see a whole new way of interacting with the world.

When we teach them these skills it is like a brand-new way for them... They have a voice at the table that which they are experts that, but they get those skills without being ridiculed or judged. They begin to value the work they do, and they see that yes, I can contribute. She’s observed that owners and managers are often surprised to see the transformation among their employees, and that they begin to see them in a new light. They become more valued, have a voice, and the boss wants to listen to what they have to say. Not only does this make the workers feel good, they become the “eyes on the field” and alert management or the Process Improvement Team to issues in the fields that management may not be aware of that can affect production, food safety, workers, or the
environment. This is a tremendous advantage for growers like Cardinal that have hundreds of acres and hundreds of employees to monitor.

In summary, Cardinal employees are afforded meaningful opportunities for personal growth and development, which they may have limited or no prior exposure to due to low levels of educational attainment, and lack of positive workplace experiences. The educational opportunities at Cardinal can be transformational and allow the worker to become a positive contributor to the organization, when in the past they survived by learning to stay quiet and pick—nothing else. Training can also help them avoid workplace injuries and illnesses, harassment, reduce waste, and ensure product is safe for the consumer.

**Responsibility**

Responsibility is the control one has for their work or the work of others. Crew leaders at Cardinal have more responsibility because the decision-making structure is flatter than at other ranches. While Cardinal was once operated under the model where employee opinions were not valued, they now encourage collaboration by inviting employee participation in decision making, and they trust and empower workers to be responsible for their own work without close monitoring.

Santiago, a crew leader, appreciates that he is respected and has freedom to *use [his] own ideas or to look for easier way to do things*. He said, *They leave us alone to do our jobs. There is no pressure. They are not on our backs. No pressure to be quick or work harder than necessary which helps us be better at [our] job.* This is markedly different from experiences at other ranches where employees described close supervision and fear of job loss or retaliation if they spoke up. Steve said that their management
strategy of empowering employees to take on responsibility in their roles provides notable advantages for the ranch, such as being able to solve problems before they start.

The ranch has two leadership bodies—the leadership structure and the Process Improvement Team which advises it and is representative and inclusive of supervisors and pickers alike.

**Leadership team.** Managers and crew leaders attend regular meetings to discuss ideas and issues confronting the ranch. When asked about this system of management, employees responded favorably, noting that the flattened management structure is an improvement in the way the ranch is being managed. Instead of having one site manager, they have a site manager and three senior crew leaders.

Roberto, a senior crew leader, said that it is better to have decision making spread out more, and that when you have only one manager, they “can do whatever [they] want with people because of the power.” Santiago, another crew leader, said that the system at the ranch works best because “we can make the right decisions and make our own decisions because we have the availability of expressing our opinions.” Pablo continued, if we had just one boss:

If that person made a mistake, we all had to accept that person made a mistake. Now we have a group. I am heading that group and if someone makes suggestion, we look at it before making a decision… Before it was my decision. This company does not allow that. You must listen to people, so they feel well about work and to have communication between me and them. There are many ranches where workers cannot talk with the supervisor. The boss said we need to listen—right or wrong, we must listen. It feels excellent to have… The conditions here are “the best.” Here they give us the means to express wants and needs.

It seems the current model of having management spread out more is working effectively for the ranch and its leaders, as it protects employees from abuses and allows better decision-making outcomes.
**Process improvement team.** As mentioned earlier, the ranch has a Process Improvement Team which is an EFI-trained leadership team and a key component of EFI-certification. As a body, the Process Improvement Team has no managerial or supervisory authority. Rather, their role is to support and advise management. Members of the team are inclusive of all departments, functions, and demographics (including gender and language ability) on the ranch and the team collaborates to aid and improve EFI compliance, performance, decision making, and conflict resolution. They also provide a safe space for employees to express grievances without fear of retaliation. Participation in the team tasks its members with the important opportunity and responsibility for improving conditions and processes for themselves, their co-workers, the ranch, the environment, and ultimately the product for the customers.

Having a Process Improvement Team means that workers do not have to passively accept poor and unhealthy working conditions or mistreatment. Rather, they are empowered to work with management if they see a problem in the field, even if it is a small problem, because the mechanism to correct it is there, and the mechanism is the Process Improvement Team.

**Unofficial responsibility.** In interviews, workers often mentioned a sense of responsibility for the safety of their co-workers, and that they keep an eye out for conditions that could cause injury. For instance, one raspberry worker said that if he sees a hole that could cause someone to trip, he immediately fills it. Rafael said that he keeps a watchful eye to see if anything is out of place, so nobody will get hurt. This sense of responsibility for their community welfare extends to helping and sharing of techniques with new workers so that they may gain the skills to do their jobs efficiently. While it
takes away from piecework production to help a new co-worker learn how to pick strawberries, there seemed to be a well-established ethic at the ranch that crew leaders and co-workers have a responsibility to help the new worker get up to speed and ensure that they are not left behind in the field because they are not moving quickly enough.

Gabby said:

If someone is far behind, [we] will help them. [We] won't leave them far away so they can't catch the trailer. [We] will help them. If there is someone that is struggling… We will not leave them back there to feel bad about themselves. We're going to go back there and help them.

**Work Itself**

The work itself is the degree to which the tasks of the job are enjoyable or otherwise are positive for the employee. Although it was challenging to get workers to discuss their feelings about their work, one theme emerged clearly—feeling free.

Fernando said he has worked in the fields since he was a child, and he likes it because he feels free. Pablo said it is much better to work in the fields than inside an office because outside it is not oppressive or full of pressure. Linda enjoys being out in the fields and being free to voice her concerns. Santiago, also, likes being free to express himself, free to voice his opinions, and free to use his own ideas. He also feels free of pressure in the fields. Martin finds the work peaceful. For about 60% of field workers and crew leaders in this study, work in the fields is the only work they have known. For the ones who have had opportunities to work in a restaurant, drug store, construction site, or for a furniture delivery company, the answer is the same. They like working at Cardinal and in agriculture more because they feel free. The favorable climate should also be noted with very little rain, and weather that is rarely hot and rarely cold, and the beautiful landscape in the distance.
Figure 5. Where the workers feel free.

Limitations to Motivation

Even with nepotism at the ranch disposed of, some employees appear individually resistant to advancement. Nicolás said, some employees “just want to do their jobs and nothing else.” Maggie recounted that when there is an opening, that a lot of the time, people do not express interest in the position, and the ranch will have to select someone. In instances where there is an opportunity for an employee to move from picker to crew leader, the position is a promotion in working conditions, status, and responsibility in the organization, but does not necessarily come with an increase in income due to the lost
earning potential as a piecework employee. Nevertheless, an employee pointed out that these positions have the advantage of being safer. Crew leaders are not stooped over all day and are not working for long periods of time in close proximity to the chemical residue on the plants.

Maggie suggested that there may be cultural reasons that workers do not seek advancement. Specifically, “as a systematically oppressed people, they do not receive benefit [from asserting themselves] in other areas of their lives,” she said. Later Maggie recounted a conversation during the Secretary of Labor’s visit in 2016 where the workers spoke of becoming discouraged after immigrating to the United States:

What the experience was like being a farm worker versus what they had thought it would be like to live in the United States when they immigrated from Mexico… [They] expressed kind of disappointment in the sense that they weren't able to achieve their dream…. That they would come to the United States, go to university, and get a good job. And then they come here, they find out that the only way to make it is to work 60 hours a week [while] sharing an apartment with other people and they don't know.

Maggie said her takeaway from that meeting was that the workers are disappointed because “their American dream, if you will, was not achieved because they weren’t able to… get that education and find better work.”

While the Process Improvement Team is not without its unintended side-effects. Santiago, a team member, said the Process Improvement Team is intended to be “one voice—not several.” One source of potential conflict and confusion emerges from having a Process Improvement Team representative on every crew. Santiago said, team members feel more in control than [crew leaders],” which can be problematic because they do not have authority to act as supervisors, which can undermine and damage co-worker relationships or the leader-follower dynamic in the field.
Summary of Motivator Factors

Contrary to conditions at other ranches which were described as being like “every dog for themselves,” Cardinal Ranch strives to be an “employer of choice” so that it can attract and retain skilled workers for years to come. Motivating characteristics found at the ranch include: (a) achieving status as experts, (b) providing employees opportunities for workers to contribute meaningfully to ranch operations, (c) fostering growth and soft-skill development, (d) providing ongoing training so that workers may perform their jobs safely, (e) creating advancement opportunities so that non-temporary workers have the opportunity to be positioned for success and advance to the next level of employment, if desired, and (f) empowering workers with the responsibility to improve work processes for themselves, their co-workers, the ranch, the suppliers, and ultimately the final product for customers.

Table 3 provides a summary overview of the motivator factors found at this ranch.

Table 3. Summary of Motivator Factors Found

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<th>Recognition</th>
<th>Employees receive recognition from customers and vendor.</th>
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<td>Achievement</td>
<td>Employees value opportunities to be a champion and having earned the right to be treated as respected professionals.</td>
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<tr>
<td>Advancement</td>
<td>Opportunities for advancement are available and decided based on merit.</td>
</tr>
<tr>
<td>Growth</td>
<td>Employees receive a variety of training on communication, conflict resolution, organizational culture, food safety and employee health and safety. Informal growth opportunities are available on a limited basis.</td>
</tr>
<tr>
<td>Responsibility</td>
<td>Decision making is decentralized, and employees advise management and share responsibility for working conditions and food safety. Employees have responsibility for performing their own work.</td>
</tr>
</tbody>
</table>
Work itself

Employees appreciate the sense of having freedom by working outdoors, freedom to do their work without pressure, and having freedom to express themselves.

Hygiene

Hygiene factors include salary and job security, interpersonal relations, supervision, company policy and administration, working conditions, status, and personal life. With comprehensive certification standards covering compliance, supervision and administration, and working conditions verified by an independent third-party audit, it is believed that certification provides a credible attestation to conditions affecting hygiene.

The following discussion is an overview of the hygiene factors observed. While many hygiene factors were noted, this section focuses on factors that stood out in observations and interviews as being significant for the workers.

Salary and Job Security

Salary is any form of compensation for work performed. Wages in the agriculture sector are often limited due to the seasonal nature of agriculture work, and the realities of market-driven commodity prices. If a strawberry producer were to raise prices above the market rate to pay their workers more, it is likely their strawberries would not sell.

Market and seasonal realities are not the only factors influencing employee earnings at Cardinal. Compensation is also influenced by production levels, the preferences and choices of the workers, and employer innovation.

No compensation data was collected from the ranch administration for this study. However, some information was provided in interviews and was found in publicly available information. When Cardinal joined EFI in 2013, it was reported in a news
article that they paid $9 per hour which was $1 above the minimum wage\(^3\) and above the average wage paid by their competitors at the time. Workers have the opportunity to work 60-hour weeks during peak seasons when earnings exceed $540 per week due to piecework. While in most any other industry, workers working 60 hours would receive 20 hours of overtime compensation, agricultural workers are excluded from overtime in federal wage and hour law and California requires overtime compensation after 60 hours of work. Based on observation, most employees worked about 40 hours during data collection due to the winter season, which would suggest minimum earnings of at least $378 per week during the period. Based on anecdotal evidence provided in interviews, it is not uncommon for pickers to earn $600 per week or more with piecework earnings, with top pickers earning as much as $80,000 a year.

To put this into context for the area, the average per capita income for the city was approximately $21,000 and the median household income was approximately $62,000 (U.S. Census, n.d). While on the surface it would seem that the potential for workers to make ends meet is there, it should be noted that picker wages are highly variable and can range from less than $75 per day to $1,000 a day or more.

In conversations with workers, employees spoke the role their choices and actions had in influencing their pay at the ranch. As Gabby stated, “What you pick is what you get paid. If you do good, you get a good check. But if you don’t, you're not going to get a good one.” Nicolás, who is paid hourly, said that while he knows he could earn more as a picker, he prefers to be hourly because he feels the risks to his health are less and the

\(^3\) After data collection was completed, California Governor Jerry Brown signed historic legislation which will gradually raise the minimum wage to $15 per hour by 2023 and provide overtime compensation for workers working more than 40 hours per week (Ulloa & Myers, 2016). This was a monumental gain for agricultural workers in the state.
most important thing to him is to stay healthy so he can continue to support three children. Diego, a picker, acknowledged the risks associated with picking, and said that in order to financially support his six children, he tries work as safely as possible, so he can continue to support his family. Workers choosing to harvest strawberries on the machine crews have the opportunity to earn 30% more than those that carry boxes to the edge of the field due to increases in productivity from partial mechanization. Yet, some workers prefer the traditional method of manual harvesting because it is less physically strenuous. Crew leaders may earn less than pickers due to the nature of piecework. Some workers are able to choose to earn less. Whatever the reason, whether it is perceived safety, easier work, or advancement—these wage/work options suggest that earnings are sufficient to provide at least some discretion.

Cardinal is actively trying to think outside the box to provide additional compensation for workers and the ranch. They partnered with the USDA to provide workers with an on-site food pantry in which workers regularly receive boxes containing enough food to feed a family of four for half a week. Another idea to create extra income is to harvest “juice” strawberries in addition to the retail strawberries which they normally pick. Juice strawberries are simply the strawberries that do not meet the aesthetic standards to be sold in stores, and account for 20% of the crop which would have otherwise been wasted simply because they are not the right shape or size for consumer markets. The operation harvests and packages these berries as juice, adding value for workers who make extra earnings by not letting them go to waste, and the ranch generates additional revenue.
Job security is the psychological expectation one has about their employment continuing within an organization. Due to the seasonal nature of field work, California agriculture workers work 36 weeks a year, on average (NAWS, n.d.), with layoffs being common within the industry when production is slow. Therefore, despite receiving what appears to be higher wages for agriculture work in the area and peak earning periods, workers expressed frustration with reduced hours and periodic layoffs, combined with a lack of overtime compensation. Several workers commented that when hours are reduced it is difficult to pay the rent. Maggie said some workers are vulnerable to homelessness when work is slow. These realities face agricultural laborers everywhere and are not unique to Cardinal Ranch.

Cardinal is striving to offer its non-temporary workers more-steady work and is working on developing more year-around employment opportunities for a core group of workers. Martin said he feels like the managers work so that employees have work, and “they don’t leave us high and dry, so we can eat.” Rosa said they have always tried to give us at least eight hours and five days [of work if it] slows down, but not elsewhere.

Although strawberries are the primary crop, they also grow raspberries and blueberries and vegetables with the ultimate goal of extending the quantity of weeks of work available through crop diversification. Another strategy of providing security, as mentioned previously, is that workers are bused two-and-a-half hours each way to another ranch with common ownership, where a labor shortage and different growing season extends the opportunity to work by up to fourteen weeks. Workers are compensated for their time on the bus, and this reduces the need to uproot families to follow the crop. Steve said that while the program is expensive, sometimes the most
expensive thing you can do is not harvest the fields, so it makes financial sense. As of the time of data collection, the ranch planned to expand this busing program to serve as many as 150 workers.

**Supervision, and Company Policy and Administration**

Supervision is the fairness and competence employees perceive with respect to how work is delegated and monitored. This includes a supervisor’s willingness to teach. Angel said he sees his role as a crew leader a bit like a “school teacher.” He looks out for employee welfare, provides encouragement, and helps workers fill their boxes when needed. One thing he says he doesn’t do is manage his workers or tell them what to do. He said, *I don't need to watch [my team] do their jobs. People understand... foreman do not need to tell us anything if we know how to do our jobs.* He continued, that what a crew leader must know how to do is how to treat people, *you must show respect to workers, so they respect me. I set the example. No bad words.*

Gerardo, a picker, said that crew leaders are “just a worker like we are,” they “have to talk to you in a way that is not insulting or demeaning to you.” Gabby said:

There are different types of supervisors. Those that push you to do better, that understand you, [and] there are those that are helpful... My first supervisor would push me to do better... He would say it doesn't hurt to bend down a little, and each day you gonna do better and that helped me to be a better picker. The supervisor I have now is flexible. When you need a day off he doesn't ask why. He will tell you it is fine, just go and don't worry about work. Just worry about what you have to do.

Ramón said that he’s heard from people at other ranches that they think this ranch works hard and the organization asks a lot of workers, but Ramón said the people who stay in the system end up doing well. Rafael said, that when new workers start, it can be difficult to understand how they operate. “Some learn. Others go,” he said.
Company policy and administration includes organizational aspects such as the adequacy and fairness of employment policies and perceived management competency. At the time of data collection, the ranch was developing an employee handbook, and standards and policies for operating the ranch. Maggie said that having “standard operating procedures and standardization are a stopgap measures for not having super high-level talented leadership in every single position,” and allows them to promote people to positions they might not otherwise be qualified for.

Fernando said that most places have rules, but here we follow them carefully. It is clean, good treatment. The treatment makes us comfortable and want to stay. There is a dress code that supports food and employee safety that is checked daily. For example, they do not want workers to have anything, such as hair, jewelry, or glitter on their clothing, that could fall and contaminate the fruit. This policy extends to not using soap or other cosmetics with a strong fragrance. They check to make sure that workers have gloves that are fully intact. Clothing is further checked to make sure it is not baggy and that shoes are sufficient to protect against slips and falls and pesticide exposure. Lastly, workers are allowed to wear small radios on their waists, but they cannot wear headphones because of the risk of getting hurt by machinery if they cannot hear. They may not listen to music with profanities or language that is disrespectful to women.

**Interpersonal Relations**

Interpersonal relations can be broken down between relations with upper management, relations with peers, and relations with subordinates. Relationship development at all levels is supported by the training in soft skills and respectful culture which does not allow discrimination, harassment, use of profanities, or horseplay.
Relations with upper management. One theme that stood out is the genuine like and admiration employees have for the ranch leaders, particularly with reference to Steve who is an owner, and whom workers who have known for years. Roberto, a senior crew leader said, “Steve, above all, is a very respectful person,” and that respect gives him confidence to do things. “If we should disagree,” he said, there is no problem, we “get back on the right track.” Rosa likes that Steve wants workers to feel like they are a part of the ranch. Linda said that Steve is very polite and kind. Most workers do not know Maggie as well because she had been at the ranch for eight months at the time of data collection. However, Roberto said she “is also very respectful, and we feel comfortable with her.” One crew leader noted, if there were one thing I would change, I would like to see Steve and Maggie in the fields more often. They are good people, Antonia said. Fernando said his relationships with his supervisors are positive, and they make him feel like family because they communicate well, and they take care of him by giving him enough work.

Relations with peers. Relations with peers were also described as being “like family,” Linda said, because they spend so much time together. Gerardo said relations are good, but he stressed the professional nature of communication which is often limited to saying hello, good morning, and see you tomorrow. Rafael said that he appreciates that nobody asks about his problems.

As mentioned earlier, new workers often struggle to keep up with crews and at other ranches this means they can be left behind in the fields. However, workers at Cardinal appear to have an ethic of being helpful to one another, and this includes helping new employees learn to pick more quickly so they do not have to struggle. Moreover, co-
workers consistently expressed that their peers are respectful towards them, and that potentially disrespectful behaviors are not allowed. Diego said, “there is no cussing or bad words. We call everyone by their proper names.” Martin, an hourly worker, said that we do not have practical jokes.

**Relations with subordinates.** Although Maggie was hired without knowing Spanish, she committed herself to learning it, and within eight months she was able to converse and lead meetings in Spanish. At the same time, I was able to converse with some of the same workers in English. When asked why she made such an effort to speak with workers in Spanish, she said:

> I feel like I'm already at a position of privilege in that like I, I understand the world and live in this world easily and so it's like a small thing that I can suffer a little bit to try to be more inclusive rather than like, well you need to change what you do in order to make me comfortable… I want it to be like I'm, I'm here to help, not, I'm here to be helped or something.

This is a philosophy Maggie would like others in the ranch to share. With 10% of workers not speaking Spanish or English, she distributed a Mixtec dictionary to crew leaders so they can learn to converse and be more inclusive of the non-Spanish speaking workers. Pablo, a senior crew leader said, “Maureen has told us we should learn basic words to talk with those from Oaxaca because they don't understand Spanish.”

Other supervisors described their subordinates and relationships with their subordinates positively. Angel said it is good to work together and solve things because you spend more time together with your than you do with your family. Pablo feels trusted by his employees, he said.

**Respect.** A basic level of politeness is readily visible at the ranch. Angel said he noticed immediately when he started at the ranch that workers were treated with respect
and the respect is mutual. The fact that respect is a major part of ranch culture was mentioned by virtually everyone, yet the word conveys different meanings to different people. Rafael appreciates that people respect your privacy. Eva, an indigenous picker, feels respected because she’s able to communicate in her own dialect. Maggie stated that it is important to respect other people’s time, and to follow through on one’s commitments. Respect to Maggie includes sharing information which may be meaningful to people. Santiago, said that respect includes hygiene, like providing workers with clean restrooms.

In summary, interviewees overwhelmingly reported positive supervisorial, peer, and subordinate relationships. Positive relationships are fostered, in part, by a respectful and inclusive culture, training in soft skills, and management modeling of desired workplace behaviors.

**Working Conditions**

Working conditions are the environmental conditions in which employees work and includes employment aspects such as access to physical amenities, health and safety, and legal compliance.

Maggie said, “they need to have a bathroom and shade within five minutes walking distance. [They] need to have potable water [containers], and cups to drink from, bathrooms, chairs to sit, handwashing station, hand sanitizer. That kind of thing.” Additional rules include cleaning and restocking the restrooms and other supplies, such as water and gloves, three or four times a day. Rosa said that *other ranches provide water, but we provide ice and Gatorade*. Antonia said the water is much better than at
other ranches. Martin said the bathrooms are always clean. *They have everything they need, equipment, gloves, plastic, gloves.* Nothing is lacking, he said.

**Stop Work Moments.** The ranch has a policy called “Stop Work Moments,” which is the policy that every employee is empowered and has the right to stop work if they see something wrong. Employees receive training on the policy, and signs are posted on the trailers with restrooms and hand-washing stations to remind crews of the conditions that should not be tolerated. The signs also provide contact numbers for workers to go up the chain of command if an issue is not immediately resolved. Maggie said, if:

> Something’s wrong… a bathroom is not sanitary, no supplies, contamination of the product, that is a stop work moment… If there is cruel or inhumane treatment, sexual harassment or discrimination, forced work, and children in the fields, that is a stop work moment… so they have this process, including my boss's phone number and email address.

Virtually every employee said that they know certain working conditions will not be tolerated, such as sexual harassment, and there is a process to rectify things without fear of retaliation. Martin and Diego said they feel safe to speak up if they have a concern. Antonia said the program has come since she started there, and that “when something is missing, like toilet paper or water, we must notify foreman. If water is dirty, we should talk to foreman rather than use unclean.” Rosa said if there’s a problem, workers can go to the office, if not resolved, they can call the HR manager, ranch manager, or the owner.

Unlike other policies and workplace standards that are posted in workplaces because employers are required to do so, Stop Work program is one employees use. Since data collection, Maggie said that workers are reporting anything they disagree with,
such as when they think a supervisor has written them up unfairly. An unintended side effect of employees feeling empowered to voice their concerns is that they sometimes skip their supervisor who is the intended first step in the resolution process and will instead contact an owner or management staff at other offices. This risks involving upper management when it may not be appropriate or necessary, it may also undermine leader-follower relationships in the fields and prevent the timely resolution of problems by the onsite crew leaders who are trained and empowered to be the first responders to field issues.

**Pesticide risks.** Pesticide exposure occurs in virtually all agricultural communities and may be unavoidable (Larsen, Gaines, & Deschênes, 2017; Krieger, 1995). It appeared that safety protocols were being observed with the closing of areas being sprayed and signs reminding workers to keep a safe distance for a certain number of hours after application. Innovative solutions, like bug vacs, were also used to lessen the need for chemicals and reduce possible exposure for workers. Even with all protocols being followed, several workers expressed concern that they will be exposed. One said:

*Right now we have fumigation going on. Other people say it does not affect you… From my way of thinking, from my perspective, I think that is why it affects a lot of newborn children, and they are born with certain things that affected them, and it is better to prevent something like that. One does not know where these problems arise from.*
Management seems sensitive and committed to pesticide safety, which is also a key component of EFI certification standards. Maggie stated that in instances of pesticide drift, she would much rather stop spraying than stop a crew. Workers, too, have said they have been trained to speak up in such instances as part of the Stop Work program.

**Machines.** The “machines,” pictured in Figure 6, move through the fields with the crews, so workers can return their strawberries to a nearby machine rather than carry them to the edge of the field. This has advantages for workers and the ranch. Cardinal benefits from improved labor productivity which partially offsets the labor shortage and reduces labor costs. It also provides the opportunity for workers to boost their piecework earnings by 30%, because workers spend more time picking since they do not have to walk to the edge of the field to exchange filled trays for empty ones. Steve described this as a win-win for everyone.
Figure 7. Strawberry pickers follow the machines through the fields.

Employees have a different view. While the machines do allow workers to earn more, they say the work is also harder. The periodic walks employees used to take to carry strawberries to the edge of the field afforded workers with time to stretch their muscles and backs and take a break, as needed. When operated by a crew leader, machines have the additional disadvantage of a supervisor (who is not picking) setting the pace which workers must follow. I was heartened to learn after data collection that another ranch with common ownership was experimenting with allowing crews to be in charge of the speed of the machines. This is an optimal solution since employees will continue to benefit from higher earnings, they will have more freedom to slow or pause the machine, as needed, to rest or stretch their backs.

**Status**

Status refers to the auxiliary benefits an employee receives from their employment. While visual signs of appurtenance were limited to a few nicer and newer vehicles in the employee parking lot and NFL-licensed products, such as backpacks, employees on the Process Improvement Team have higher perceived status within the
organization, even though their positions are otherwise equivalent in position and pay to other workers. Likewise, crew leaders have a higher status due to their position but may earn less than their subordinates. Both groups participate in meetings with ranch leadership and additional training, which some workers covet participation in due to limited interaction with Steve and Maggie who are held in high regard.

**Personal Life**

Personal life describes the influence the work has on the employee’s life outside of work. When asked, workers talked of long hours at work, ice cream cones on Sundays, being tired, taking children to the park, picking children up from daycare, going to swap meets, running errands, dancing, and doing chores. More than one discussed pain:

> This is very heavy work. You can imagine you are stooping, you are bending, and picking. Your back hurts. Your legs hurt. Everything hurts. It is something you don’t ever get used to. Even though you may work a few hours here when you get home, you are really tired.

While the work is strenuous, employees state that Cardinal is a good employer for working parents. They said that they are always flexible and accommodating when someone has to be away from work or has to leave due to family needs. They are also looking into the prospect of offering quality daycare which would be a terrific benefit for families if it comes to fruition. Their efforts to offer stable employment is also beneficial for workers because they do not need to uproot their families and take their children out of school to follow the crop.

**Summary of Hygiene Factors**

The EFI certification provides independent verification that a wide array of hygiene factors are met. Notable hygiene factors found during data collection include:
(a) wages that are higher than the state minimum wage and average for agriculture labor in the area, (b) efforts by the employer to provide stable employment more weeks out of the year, (c) constructive supervisory relationships, marked support and development rather than close monitoring, (d) interpersonal relationships based on positive regard and mutual respect at all levels of the organization, (e) company policies that support health and safety, (f) working conditions that workers find acceptable, and (g) personal life that is hampered by the strenuous nature of the work but is beneficial for families.

Table 4. Summary of Hygiene Factors Found

<table>
<thead>
<tr>
<th>Factor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary</td>
<td>Ranch offers improved earnings and take-home pay can be higher during peak season due to 60-hour weeks and piecework potential to earn up to $80,000 per year. However, earnings and hours are variable based on the agricultural season and may include periods of work interruptions, with the take-home earnings of some employees possibly below the poverty threshold.</td>
</tr>
<tr>
<td>Job Security</td>
<td>Employer attempts to innovate solutions to offer core workers more stable and year-round employment as much as possible.</td>
</tr>
<tr>
<td>Supervision</td>
<td>Supervisors are trained to respect, encourage, and coach workers, and problem mechanisms are in place to resolve problems quickly.</td>
</tr>
<tr>
<td>Interpersonal Relations</td>
<td>Relations with supervisors, peers, and subordinates are professional and respectful.</td>
</tr>
<tr>
<td>Company Administration</td>
<td>Fair policies are developed and carefully followed.</td>
</tr>
<tr>
<td>Working Conditions</td>
<td>Working conditions are clean, and policies and practices are in place to minimize threats to employee welfare. Employees expressed concerns about pesticide safety and working on the machines.</td>
</tr>
<tr>
<td>Status</td>
<td>Visual signs of appurtenance were limited.</td>
</tr>
<tr>
<td>Personal Life</td>
<td>Employer is supportive of working families; however, time off may be affected negatively by pain and exhaustion from the nature of the work as well as the long hours.</td>
</tr>
</tbody>
</table>
Influence of Hygiene and Motivator Factors on Satisfaction

Motivator Factors

While employees appreciate and are motivated by the recognition they receive from customers and vendor-provided bonus, this recognition is external. This is not to suggest that internal stakeholders do not provide positive feedback. Rather, internal recognition was not observed during data collection. Another form of motivation is the intrinsic satisfaction employees gain from seeing the results of their labor. When employees are able to produce a good number of boxes in a day, this provides a sense of pride and self-esteem that they are good at their jobs and are able to support their families. Motivation is amplified when employees are recognized as professionals who do not require close supervision.

It appears that there are regular opportunities for employees to advance in their positions at the ranch, that information about these openings is disseminated widely among employees, and that positions are filled without nepotism or favoritism in hiring. While the opportunity and experience of advancing in their careers is a source of satisfaction for most employees, this desire is not shared by everyone. For instance, while moving from a position as a picker to a crew leader means more responsibility and status within the organization, it also means lower potential earnings due to the loss of top piecework earnings. For others, the incongruence between the expectations they had for their careers prior to coming to the United States and the later dissatisfaction from realization that their dreams will never be realized has left some feeling discouraged about their prospects for improving their present situation. Furthermore, it could be understandably difficult for an employee to have confidence that they will be fairly
considered for a position when their experience prior to working at Cardinal was that better positions are filled through nepotism or favoritism only.

The opportunity for personal and professional growth is perhaps the leading motivator factor observed. Employees feel good about the way they are treated and they treat others, and this feeling is a direct result of the interpersonal trainings on topics like communication and conflict resolution which have allowed them to grow interpersonally. With this growth comes the responsibility to use these skills to improve working conditions for themselves and others, ranch performance, and ultimately the final product for the vendor and the consumer. Ultimately, they become trusted partners, and employees use their expertise to advise management so that better and more timely decisions are made. These conditions are in stark contrast to the conditions on other ranches where employees are silenced and told to do nothing but pick, even if staying quiet means jeopardizing food safety.

The potential increase in motivation from growth and advancement is limited or non-existant for workers that just want to do their jobs and nothing else. Furthermore, there is a culture among some agriculture workers that is resistant to job training because they just want to do things the simplest and quickest way, even if it is not safe, and that tendency needs to be fought against.

The environmental conditions observed could not have been more pleasant. The climate has few cold, hot, or rainy days. The property is clean, well-maintained, with crisp coastal-mountain air permeated by the fragrance of fresh strawberries, and the beauty of the fields and mountains in the distance is sublime. It is very easy to feel at peace, and the sense of feeling free that employees experience is one that resonated with
me also. However, no matter how picturesque the beauty of the ranch, or peaceful feeling of being free at work, the one thing that most pickers cannot escape is the pain and exhaustion that they feel at the end of the day, or the fear of other health risks associated with strawberry harvesting.

Table 5. Motivator Factors

<table>
<thead>
<tr>
<th>Motivator</th>
<th>Increases Motivation</th>
<th>Decreases Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognition</td>
<td>• Provided by appreciative customers and vendor quality bonus</td>
<td>• Recognition by employers not observed during data collection</td>
</tr>
<tr>
<td>Achievement</td>
<td>• Being a champion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Employees are valued as experts that have earned a seat at the table where they are listened to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Professionalism of employees reduces need for supervision</td>
<td></td>
</tr>
<tr>
<td>Advancement</td>
<td>• Advancement opportunities are available and decided based on merit</td>
<td>• Disappointment with career and educational outcomes after coming to the United States may lead to worker discouragement</td>
</tr>
<tr>
<td>Growth</td>
<td>• Employees receive training on communication, conflict resolution, and leadership development that they never experienced before</td>
<td>• Not all employees are interested in growth opportunities.</td>
</tr>
<tr>
<td></td>
<td>• EFI training gives workers a voice and teaches them to use it to improve conditions for themselves, the ranch, and the product for the consumer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Leadership Academy aligns employee-employer goals and develops culture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Employees learn about their rights and how to protect themselves</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Employees find training benefits other aspects of their lives, including with family</td>
<td></td>
</tr>
<tr>
<td>Responsibility</td>
<td>• Employees are trusted</td>
<td>Some employees want to just do their jobs and nothing else</td>
</tr>
<tr>
<td></td>
<td>• Employees advise management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Employees share in responsibility for working conditions and food safety</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Decision making is decentralized</td>
<td></td>
</tr>
<tr>
<td>Work itself</td>
<td>• Feeling of freedom from being outdoors</td>
<td>• Work is difficult and tiring, and poses health risks</td>
</tr>
<tr>
<td></td>
<td>• Freedom to perform their work without close monitoring or pressure</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Freedom to express themselves</td>
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</tr>
</tbody>
</table>
Hygiene Factors

The risks Steve and Maggie are willing to take to innovate labor solutions and provide core and non-seasonal employees with more weeks of work if not more year-around work commendable. Non-seasonal and core employees frequently expressed gratitude that Cardinal tries to give them the hours they need and to ensure there is always enough work to survive because they recognize it is not like this at other ranches. Nevertheless, seasonal employees face periods of reduced hours, layoffs, unemployment and may uproot families to follow the crop. While they may have come to accept that this is the reality of agriculture work, the perpetual lack of job security and uncertainty about their ability to support themselves and their families is understandably a key source of dissatisfaction. Problems experienced due to highly variable earnings and potential disruptions in work could be exacerbated by low levels of education that may limit their ability to find non-agricultural employment or to budget or plan for the future, such that even higher earners could at times be vulnerable to homelessness.

The supervision I observed is excellent and would almost certainly reduce potential dissatisfaction with the work. Employees stated that they feel encouraged, helped, supported, and respected by their crew leaders and ranch managers. When problems arise, there is a dispute resolution in process to promptly address the issue so that negative feelings among employees and the operation do not fester. However, this style of management is so different from the way other ranches are operated that it was reported that some new employees cannot understand the leadership style and leave. Other times, new employees may not immediately recognize the benefits of or experience the improved supervision, such that they may think the ranch is the same as every other
ranch. This lack of knowledge likely contributes to dissatisfaction and is problematic for both the ranch who needs workers and the employees who lose out on the opportunity to have improved working conditions and supervision because they quit prematurely.

However, not everyone is a fit for this style of management, too. For instance, an employee who sexually harasses co-workers will likely be quickly terminated. Likewise, supervisors that do not value employee contributions are not a fit, either.

Interpersonal relations are amicable. Regardless of position, employees feel respected by their supervisors, peers, and subordinates. There is a high level of admiration for Steve, in particular, by employees who say he cares about workers. Friendly and professional relations are observed between employees. There was very little conflict observed. Horseplay, practical jokes, and profanities are not tolerated, and virtually all employees said that they feel safe speaking up when there is a problem. Therefore, amicable relations likely reduce employee dissatisfaction with the work.

The policies and administration are perceived by employees as fair and beneficial to operations and likely limit dissatisfaction. From conversations and observation, some employees may also resist safety practices in favor of doing things a faster and easier way, even if it is less safe or contrary to the safety training they receive. For instance, while trips and falls are a leading cause of injuries at the ranch, several workers said that employees will run boxes of fruit to the edge of the field to increase their earnings during peak season. However, I was not able to observe this during data collection. Other employees commented that some employees discard rubber gloves in the toilets even though they are not supposed to, which also suggests handwashing protocols that require employees to wash their hands before using the restrooms are not universally followed.
The restrooms and break areas are clean, well-stocked, and provide little reason for employees to be dissatisfied with physical working conditions. If things are not the way they should be in these areas or in the fields, employees are empowered to speak up so that these concerns can be addressed immediately.

Nevertheless, inherent in manual strawberry harvesting is the risk of musculoskeletal injury and pesticide exposure, and while personal observation and EFI certification suggest that the ranch actively does its part to minimize these risks, employees still expressed concerns that they do not feel safe, particularly because pesticides are sprayed during working hours in areas that are visible from the fields where they are working. In addition, there are occasional instances of pesticide drift where employees say they feel the mist of chemicals applied due to the wind, and a residue from the plants that gets on their clothing. The dissatisfaction some employees experience with pesticides is not entirely within the ranch’s control. A portion of it appears to rest within the employee’s perceptions of their personal safety, which were likely developed at other ranches, before starting work at Cardinal, and reinforced whenever a child or someone in their community gets sick or is born with a birth defect.

Table 6. Hygiene Factors

<table>
<thead>
<tr>
<th>Dissatisfier</th>
<th>Decreases Dissatisfaction</th>
<th>Increases Dissatisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary</td>
<td>• Wages are higher due to 60-hour work weeks</td>
<td>• No overtime compensation unless over 60 hours per week</td>
</tr>
<tr>
<td></td>
<td>• Ranch offers improved hourly earnings</td>
<td>• Picker earnings are variable</td>
</tr>
<tr>
<td></td>
<td>• Opportunity to earn up to $80K</td>
<td>• Some earn less than $20,000 per year</td>
</tr>
<tr>
<td></td>
<td>• Employees have discretion to pick, or pursue hourly or supervisory positions which offer reduced earning potential but are considered safer</td>
<td></td>
</tr>
<tr>
<td>Job security</td>
<td>Supervision</td>
<td>Interpersonal relations</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Employer uses a variety of strategies to offer more hours or year-around</td>
<td>Crew leaders are like school teachers that encourage and help workers</td>
<td>Regardless of position or relationship, ranch members feel respectful</td>
</tr>
<tr>
<td>employment</td>
<td>Supervisors show employees respect</td>
<td>With managers: Ranch and crew leaders are viewed as helpful, respectful, and caring</td>
</tr>
<tr>
<td></td>
<td>Problem resolution mechanisms are in place to resolve problems quickly</td>
<td>With peers: Relationships are professional, caring, and helpful</td>
</tr>
<tr>
<td></td>
<td></td>
<td>With subordinates: Managers feel respected by their employees</td>
</tr>
<tr>
<td></td>
<td>Occasional disputes between pickers and recordkeeping/quality control</td>
<td>Not observed during data collection</td>
</tr>
<tr>
<td></td>
<td>Limited contact with management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>New employees may find it difficult to understand how the ranch operates</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Policies are followed carefully and administered fairly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employee facilities are clean, considerate, and fully stocked</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Machines increase productivity and earning potential</td>
<td>Employee may not feel safe from pesticide exposure</td>
</tr>
<tr>
<td></td>
<td>Stop Work Moments stop work immediately to resolve employee welfare, health</td>
<td>Work on machines is more arduous than manual harvesting</td>
</tr>
<tr>
<td></td>
<td>and safety, and food safety concerns promptly</td>
<td>Some employees bypass crew leader with concerns</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employer is supportive of working parents</td>
<td>Work is physically arduous, and can be painful</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Chapter Summary**

This study found employees experienced better treatment compared to other agricultural operations, and that conditions were rich in both motivator and hygiene factors. Motivator factors were marked by (a) the recognition employees receive from customers and a vendor; (b) sense of achievement from high rates of production and being treated and respected as professionals; (c) opportunities for advancement that are
fair and based on merit; (d) an abundance of growth and development opportunities, including communication and problem solving skills; (e) responsibility workers have to improve the workplace and share in decision making, and (f) a sense of freedom from oppressive working conditions. Hygiene factors were marked by: (a) high/low earning potential and potential work interruptions; (b) employer actively striving to offer more year-around employment to core employees; (c) trained and fair managers; (d) amicable and respectful interpersonal relations at all levels; (e) fair company policies and administration; (f) working conditions that promote employee health and welfare; (g) quality of personal life that is diminished by low hours and potential for back pain; and (h) employer is supportive of families.
CHAPTER V
APPRECIATING THOSE THAT FEED US

As a professional field with a stated commitment to benefit firm performance and nourish the growth and potential of all workers in society, human resource development scholars and practitioners should consider the potential responsibility we have to agricultural workers and employers, particularly during these rapidly developing and changing times. Employers are challenged by uncertain immigration reform and enforcement with some proponents advocating changes that would, if realized, deport half or more of the agricultural industry’s workforce when the industry already is experiencing labor shortages and are without enough workers to harvest the plants in the fields (California Farm Bureau Federation, 2017; “Donald Trump’s Full Immigration Speech,” 2016; Exec. Order No. 13767, 2017; Passel & Cohn, 2016; US DOL, n.d.b). Consequently, employers are under intense pressure to transition from manual harvesting to robotic harvesting just to continue to produce the nation’s food (Bouffard, 2016; Peters, 2017). One-out-of-two agriculture workers live in constant fear or uncertainty whether they will be able to able to continue working and stay in this country or whether they will be deported or separated from loved ones (“Ice ERO Immigration Arrests,” 2017), in addition to suffering from low wages, periodic work interruptions, and risks to health and personal welfare that threaten their well-being (Benson, 2008; Bischoff et al., 2012; Kim-Godwin, Alexander, Felton, Mackey, & Kasakoff, 2006; National Safety Council 2015; US DOL, 2016.
Research Purpose and Questions

To this end, this case sought to provide meaningful starting place to begin to examine and consider HRD practices already in place in the industry. Therefore, the purpose of this study was to understand the process through which a single agricultural operation fosters optimal conditions for workers engaged in labor-intensive crop production. Specifically, this study asked:

- What are optimal labor conditions for workers engaged in labor-intensive crop production?
- What are the beliefs and/or perspectives of the agricultural operation that led to the development of optimal conditions?
- What processes or procedures were used to make the conditions optimal?

Optimal Labor Conditions

The employer in this study was found to provide conditions that were arguably better than the typical conditions available to strawberry pickers in California, as is evidenced by the absence of a picking quota, and presence of clean restrooms, adequate supplies, positive interpersonal relations, professional and trained management, and safety culture that includes provisions for pesticide safety, and protections against discrimination, and sexual harassment and assault. The work is further enriched with available and meaningful opportunities for responsibility, growth, and advancement, as well as opportunities for more year-around employment for core employees. These conditions were not developed through the employer’s efforts alone but benefited from their participation in the Equitable Food Initiative, which establishes standards for labor-management cooperation, non-retaliation, compliance with labor law, freedom of
association, fair compensation, fair working condition, non-discrimination, dispute settlement processes, housing, guest worker protections, and worker involvement (EFI, 2018). Conditions are further supported by active involvement with a network of service and workforce development providers, such the California Strawberry Commission, Mixteco Indigena Community Organizing Project, United Farm Workers Union, and the University of California, Los Angeles.

**Theoretical Framework**

Given the dearth of information available on optimal labor conditions for workers engaged in labor-intensive crop production, Herzberg’s (1959) motivation and hygiene theory was selected as the theoretical framework for this study due to the theory’s potential to identify, conceptualize, and illuminate optimal working conditions from the crop worker’s perspective. Optimal agricultural work, it was thought, would not only be fair, healthy, and humane, it would be enriched by growth and development opportunities beyond the level necessary to perform the functions of the job. Herzberg’s two-factor theory was deemed useful for this purpose because it identifies characteristics for physiological of psychological needs. While this is study was not intended to be a critique of Herzberg’s work, a comparison between Herzberg’s original and subsequent studies, including this one, is illuminating.

**Different Motivations**

Firstly, the dissimilarities between the participant’s in this study and Herzberg (1959)’s study are striking. Hofstede (2009) found the culture in the United States and Mexico vary in the following dimensions presented in Table 7.
Table 7. Cultural Dimensions of Mexico and the US (adapted from Hofstede, 2009).

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Description</th>
<th>Mexico</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Distance</td>
<td>The extent to which the less powerful members of the organization accept that power is distributed unequally.</td>
<td>81</td>
<td>40</td>
</tr>
<tr>
<td>Individualism</td>
<td>The extent to which individuals are integrated into groups, with individualistic cultures having loose ties, and collectivist cultures having tighter bonds and integration in cohesive groups.</td>
<td>30</td>
<td>91</td>
</tr>
<tr>
<td>Masculinity</td>
<td>The extent to which gender roles are distributed in a society, with more assertive and competitive cultures being characterized as masculine.</td>
<td>69</td>
<td>62</td>
</tr>
<tr>
<td>Uncertainty Avoidance</td>
<td>The extent to which a society is tolerant of ambiguity and uncertainty.</td>
<td>82</td>
<td>46</td>
</tr>
</tbody>
</table>

In Mexico, the more marginalized and oppressed members of society are likely to readily accept organizational power distances and will be deferential to authority (Harrison & Hubbard, 1998; Hofstede, 2009; Pavette & Whitney, 1998). Societal members are bound to the collective well-being of others in their network of friends, family, or coworkers. The tolerance for uncertainty and ambiguity is the society is high. In contrast, the United States has lower levels of power distance perceived by the more oppressed and marginalized members of the society. This may be due, in part, to equality being regarded as an important American value (Hofstede, 2009; Kohls, n.d.). The highly individualistic culture also values self-reliance and individual achievement and advancement (Hofstede, 2009; Kohls, n.d.).

In addition to the fundamental cultural differences between the two groups of participants, the subjects in Herzberg (1959)’s study were skilled middle-class
professionals that were educated or college-educated in their fields of engineering and accountancy. It is assumed that because the 1960’s Civil Rights Movement had not yet occurred at the time Herzberg collected data and because discrimination was still legal and commonplace in parts of the United States, that the absence of any discussion of the racial composition of participants was because they were likely mostly White or universally White; however, this could not be verified. Subject backgrounds varied on the basis of age and education, but not on gender, as women were not included among the participants of the study.

To the contrary, the workers in the present included males and females who are predominately indigenous peoples that immigrated from Mexico where their ethnic groups are highly marginalized in society. On average, indigenous Mexicans experience higher rates of poverty, lower levels of educational achievement, and are susceptible to multiple forms of discrimination (“Indigenous Farmworker Study,” 2010; Holmes, 2006; 2013). This pattern of oppression replicates itself when the workers come to the United States and they often end up performing the most dangerous or undesirable jobs in agriculture (Holmes, 2006; 2013).

Interestingly, Herzberg conducted pilot tests that included clerical and production workers, but the research team decided to move forward with the accountants and engineers only based on the following two considerations:

First, middle-management people are more verbal, better educated, and more conscious of the ebb and flow of their attitudes. They were able to communicate with us far better than the production-line workers or clerical workers to whom we spoke. Another consideration, which was somewhat secondary but not completely absent from our thinking, was that industry was greatly concerned about the attitudes of middle-management people towards their jobs (p. 24-25).
This statement likely reveals a clear preference for participants that were most like the research team (e.g., likely male, educated, middle class, and White), and for whom Herzberg assessed their opinions as having the most value. Therefore, for a study that claimed to provide greater generalizability of their results by interviewing two occupations from different employers rather than one (Herzberg, 1959), an obvious weakness inherit in this methodology was the selection bias. Moreover, what ethics does the research community have if we intentionally omit people who are less educated than us or are unable to communicate like us? It was precisely this kind of omission of farm workers from research in HRD and other disciplines that was an impetus for this study in the first place.

Finally, Herzberg’s conclusion that man is motivated to “actualize himself in every area of his life, and his job is one of the most important areas” (Herzberg, 1959, p. 113) assumes the individualistic and achievement-oriented tendencies that Americans have, but are not universal (Hofstede, 2009; Kohls, n.d.). In Mexico, women have been found to be less committed to the workplace due to their family responsibilities (Harrison & Hubbard, 1998; Pavette & Whitney, 1998). Pelled and Xin (1997) found that work in Mexican culture is “viewed as a means to an end (employment and the support of one’s family), rather than an end in itself” (p. 187). This is consistent with the highly collectivist society identified by Hofstede (2009), and the results of the present study. When workers at Cardinal were asked what motivates them to do their best at their jobs, the most frequent response was their families.

Twenty-eight years after Herzberg’s original study, he “summarized cross-cultural replications of The Motivation to Work” (Herzberg, 1987), finding that “in spite
of cultural differences, workers around the world tend to demonstrate a tendency towards satisfaction with job *intrinsics* and dissatisfaction with *extrinsics* (Herzberg, 2017). However, as mentioned earlier, a leading criticism of the theory is that the critical-incident technique may trigger the natural human tendency for people to take credit for things that go well, and place blame elsewhere when things that go wrong, and this process occurs to protect their ego and self-esteem (Bassett-Jones & Lloyd, 2005; House & Wigdor, 2009; Vroom, 1964). Therefore, it follows that replicating the original study in different cultures using the same critical incident methodology would logically replicate patterns originally identified by Herzberg. This weakness in the methodology, it is argued, may artificially force the “things that go wrong” to be classified as hygiene factors and “things that go right” as motivators.

For comparison, this study reviewed 15 studies that utilized Herzberg’s theory to investigate the needs of employees in different occupations, industries, career stages, and countries. This review found some studies with results similar to Herzberg’s (Hur, 2018; Ismail, Yahya, Sofian, Hussin, & Raman, 2017; Wang, Pollock, & Hauseman, 2018) and that employees view some work characteristics as being sources of satisfaction and dissatisfaction both or as having opposite effects (Butt, 2018; Hines, 1973; Machungwa & Schmitt, 1983; Mustata, Fejete, & Matis, 2011). Other studies found workers have different hygiene and motivator preferences (Nair & Ghosh, 2006; McLean, Smits, & Tanner, 1996; Sahinidis & Kolia, 2014; Thalitath & Rejoice, 2012). Different sources of motivation were also identified (Bitsch & Hogberg, 2005; Breslin, MacNab, Worthley, Kibigting, & Jukis, 2005; Mustata, Fejete, & Matis, 2011; Rijavec & Ridicki, 2000; Shannon, 2019).
In conclusion, Herzberg’s theory was chosen as the primary basis for the theoretical framework and as a lens to conceptualize and identify optimal workplace conditions. Upon deeper analysis of the present case and Herzberg’s theory, the question emerged whether Herzberg’s theory is culture bound? A review and comparison of Hofstede (2009)’s Cultural Dimensions found that Mexican and American cultures vary widely in terms of power distance, individualism-collectivism, and uncertainty avoidance. The subjects in Herzberg (1959)’s and the present study further differ in class, educational levels, skin color, and gender. The pilot test Herzberg utilized production and clerical employees in addition to engineers and accountants, but the research team eliminated the production and clerical employees out of apparent selection bias and chose instead the subjects that were the most like them. His study was based on a further misconception that all individuals are driven towards actualization in their work. This assumption is problematic, particularly for this study because members of the Mexican culture are more likely to view work as a way to support their family than as a source of achievement. A review of 15 research articles that utilized Herzberg’s theory in a variety of contexts, including occupations, career stages, industries, and countries found that based on this limited review that motivation and hygiene factors could be influenced by factors such as culture, occupation, career stage, or industry. Therefore, based on these findings, Herzberg’s assertion that the theory is applicable and will produce consistent results across cultures is not adequately supported. This finding does not rule out the theory’s relevance and applicability as a way to conceptualize and identify employee needs in a variety of situations. Rather, it suggests that results should be considered culturally and contextually specific.
How Well Did Herzberg’s Theory Apply to This Case?

One of the earliest discoveries made at the research location was how clean and well-maintained the restrooms were relative to observations of other employers. Likewise, when I asked about the facilities at Cardinal, I anticipated employees might share my enthusiasm, particularly given the filthy conditions that were described at other ranches. The frequency with which facility conditions were mentioned is consistent with Bitsch and Hogberg (2005)’s finding that facility conditions are important to agriculture workers; however, the matter-of-fact tone and statements like “restrooms should be clean,” and “this is how it should be,” emphasized that adequate, stocked, and clean facilities as a fundamental condition which employees are entitled to rather and not a benefit of that would make them feel good about their work.

Similarly, after hearing the degrading and dehumanizing treatment at other ranches, I assumed employees might speak more favorably about the respectful treatment at the ranch. Again, the prevalent statements were matter-of-fact that subordinates, co-workers, and supervisors “should be respectful,” as an expectation of how individuals should relate with one another and is consistent with the collectivist culture in Mexico that values harmonious relationships (Harrison & Hubbard, 1998; Pavette & Whitney, 1998), where employees develop positive working relationships and friendships with people at work (Pelled and Xin (1997)

In both these instances—adequate facilities and respectful treatment—seemed to hold psychological importance to the workers. Nevertheless, they are classified as hygiene factors because they do not produce satisfaction or motivation but would produce dissatisfaction if absent.
According to Herzberg (1959), once a certain threshold of earnings is met, money can only be a motivator when it is a form of recognition or achievement. Otherwise it is a hygiene factor. Consistent with prior research challenging salary as a hygiene factor (e.g., Bassett-Jones & Lloyd, 2005; Butt, 2018; Mustata, Fejete, & Matis, 2011), this study produced mixed results. Receiving the supplier bonus and being a champion picker were two key sources employees mentioned where they experienced motivation from recognition and achievement. In instances where compensation was not sufficient, Bitsch and Hogberg (2005) found that motivators and hygiene factors can be substituted for one another. Therefore, the supplier bonus and being a champion picker may help an employee feel their salary is more acceptable, and ultimately feel less dissatisfied.

However, as mentioned earlier, Herzberg’s conclusion that man is motivated to “actualize himself in every area of his life, and his job is one of the most important areas” (Herzberg, 1959, p. 113) was not confirmed. Rather, Pelled and Xin (1997) suggested that in workers in Mexico view work as “means to an end (employment and the support of one’s family) rather than an end in itself)” (p. 187). Therefore, when workers were presented with available opportunities for growth and advancement that included work that was more stable and less strenuous, some employees sought and accepted these opportunities, and others did not. Pelled and Hill (1997) provided a possible explanation for why employees could be disinterested in applying for these positions, and that is that the employees with the greatest interest in continually advancing in the organization also exhibit higher levels of turnover, suggesting that individuals wanting to advance and feel they are not moving up in the organization quick enough and may leave. Another possible explanation is they may not want to contend with the loss of piecework income.
which provided the opportunity to earn higher overall wages. In addition to possibly needing additional income to make ends meet, a further possible explanation is this type of sacrifice could, in part, be cultural, as providing for one’s family may take priority over other factors, like comfortable work, and the pride one may take in being a champion may be that it could signify that one is good at taking care of their family.

Gerardo, for instance, said that he’s been working since age nine, and although he was 25 at the time of data collection, said his body feels like he’s 40. He said he does it so his son can “have the things she has, to go for an ice-cream or whatever.” Another possible explanation arose after data collection during the discussion employees had with the Secretary of Labor, and that was that workers may not try to advance because they have not had much luck or success in improving their situation since arriving to the United States, and in time may have become discouraged.

Fair-employment, trained and professional supervision, and positive working relationships may help to alleviate sources of job dissatisfaction. Some workers nonetheless described their lives as a daily struggle, consisting of everything from constant pain and exhaustion from 60-hour, six-day weeks, to fears they will get sick from pesticides or injure their hands and not able to work, to a preoccupation with personal problems like poor quality daycare, or what is going to happen to their family when they cannot pay the rent. While at work, pickers must juggle information and a myriad of tasks to make quick determinations about whether or not a particular strawberry is safe for human consumption, the right shape and size and correct level of ripeness, while also packing strawberries into containers in a way that is both attractive and the correct weight. At the same time, workers must do this while exercising stamina,
balance, coordination, and regulating body function in order to maintain a steady and healthy rate of production, while also avoiding injury, dehydration, exhaustion, and pesticide exposure. Therefore, it difficult to imagine that with so many pressures at home and work that many workers have resources left over to devote to—or even think about—their growth and development, when clearly, their situation requires focus on meeting their immediate needs, needs of their families, and to perform the task at hand. Herzberg (1959) wrote, when a society “spends 70 to 80 per cent of its labor on the mere growing of food there is relatively little left over for the fullest development of the individual” (p. 113).

As this study showed, employer-provided conditions alone—though excellent—are insufficient to completely eradicate human suffering from crop work. There are structural barriers and limitations to employee welfare that are beyond the firm’s control but nevertheless warrant consideration in any discussion of optimal working conditions. Fundamental federal labor rights enacted 80 years ago deny agriculture workers overtime compensation that is afforded to almost all other workers (Arcury et al., 2012; Benson, 2008; Luna, 1998, Telega & Maloney, 2010). In California, where most farm workers will gain rights to overtime compensation for hours over 40 a week by 2022, only 19% of farm workers are eligible for unemployment insurance due to immigration status (Benson, 2008; Rural Migration News, 2018). Labor shortages, coupled with the lack of overtime requirements, have meant that strawberry pickers spend long hours in the fields—typically ten-hours-a-day, six-days-a-week, thirty-six-weeks-a-year—while stooped over and exposed to pesticides, at peril to their health, back, hips, and knees (California Farm Bureau Federation, 2017; Centers for Disease Control and Prevention,
2013; Halfacre-Hitchcock, McCarthy, Burkett, & Carvajal, 2006, p. 56; Holmes, 2006, 2013; U.S. Government Accountability Office, 1994). With four or seven years of education, and most workers without skills, training, or experience to work in other industries, it is difficult to imagine the remaining sixteen weeks each year for those who are already below the poverty line and have no agricultural work, no skills to work in any other industry, and no unemployment insurance in the interim to fall back on (US DOL, 2016). As mentioned in the findings, workers periodically find themselves confronting possible homelessness or not being able to eat or feed their families. These conditions conspire to place pressure on employee time, income, and bodies outside of work, and limit available resources for workers to improve their situations by continuing their educations or pursuing a different career path and may ultimately prevent workers from achieving their American dream. These structures are maintained by a lack of societal awareness about human suffering in this community, lack of awareness of how our food is produced, and reinforced by negative and even racist stereotypes and media portrayals that suggest immigrants entering the country illegally are rapists, violent criminals, gang members, and that steal American jobs (Farmer, 2004; Galtung, 1990).

Limitation

A limitation of the analysis was the tendency for some workers to respond in short statements or one or two-word answers. For instance, when asked to describe conditions on the ranch, Antonia said, they are good. When I inquired further, she said because everything is fine. I found it difficult to overcome this resistance and to probe for deeper meaning in some circumstances largely due to my own inexperience as an emerging researcher. Perhaps another factor is that workers found it difficult or were otherwise
reluctant to express themselves. Therefore, the information that was gleaned from the interviews was not as rich as I would have liked.

Another limitation was that an interpreter was used during interviews. While every effort was made to ensure the conceptually accurate interpretation of meaning, this undoubtedly affected the dynamics of interviews. Furthermore, the selection of a male interpreter for discussions of workplace conditions was poor given that it may have made it difficult to discuss sensitive issues, like sexual harassment, with female workers.

A final limitation was my choice to interview workers only once. It may have taken two or three interviews before workers would feel more comfortable and safer discussing their employment experiences.

**Policy Implications**

In order for conditions to truly be optimal, structural barriers preventing agriculture workers from earning a stable and living wage would need to be eliminated. One way to accomplish this is to remove legal barriers in order to provide all workers equal access to overtime compensation and unemployment benefits. Innovative strategies to provide employees with more weeks of work, like busing workers between ranches, deserve consideration where legal requirements fail.

As mentioned previously, market forces are compelling strawberry growers to invest into robotic harvesting techniques to solve labor supply issues. Other sustainable agricultural techniques that are being experimented with include growing strawberries using vertical planters and hydroponic systems, which are techniques that would likely eliminate the need for workers to stoop over to pick the strawberries. While an in-depth understanding of pesticides and sustainable growing techniques are beyond the scope of
this project and researcher’s discipline, it is my understanding that adapting these
techniques offer the additional benefits of eliminating the need for harmful chemicals and
providing more year-around employment. This is not only a gain for agriculture workers,
it is good for consumers and the environment. Therefore, the USDA’s National Institute
for Food and Agriculture should continue to fund and seek to expand grants to promote
transition and expansion of sustainable techniques that minimize harm to workers,
consumers, and the environment.

While extension offices can help prepare workers grow the skills to keep up with
advancements in agriculture, a consequence of transitioning to different growing and
harvesting techniques is that a portion of agriculture workers engaged in the most labor-
intensive will be at risk of being permanently displaced from their occupations.
Therefore, strategies will need to be developed to ensure these workers have the training
and skills to move to different occupations, and that this training is accessible, tailored to
meet their unique educational needs, and made available regardless of immigration status.

**Research Implications**

The strawberry gem example provided in Chapter V is a shining illustration of
what can be accomplished when an agricultural employer rejects the false notion that
crop workers are only capable of performing manual tasks, and instead chooses to
unleash their hidden potential and elevate them to the role of strategic partners who are
empowered with a voice to improve the organization.

**Employee Attitudes and Risk Perceptions**

I appreciate the candor with which employees described working conditions at
other ranches. However, one topic that was conspicuously absent from these
conversations was any mention of sexual harassment, when sexual harassment affects the majority of women in agriculture (Kim, Vásquez, Torres, Nicola, & Karr, 2016). This absence was noteworthy given that women in this study nevertheless wore additional clothing to cover their backsides in an apparent effort to prevent unwanted male attention, despite the stop work program and sexual harassment training for supervisors and workers. These observations made me wonder if sexual harassment remains an unspoken concern for female workers at Cardinal? Likewise, I also wondered if their pesticide safety and training programs are sufficient enough to engender employee trust that those risks are being managed effectively?

These questions are in no way intended to suggest that I observed any problems in how either sexual harassment or pesticide safety are being managed or not being managed, with pesticide safety being greatly outside my expertise anyway. Rather, the underlying question may be, what if an employer is doing everything possible to manage these risks proactively and employees remain afraid? While employees should take precautions to protect themselves, the risk in employees having disproportionate fear relative to the actual risk could be that employees are dissatisfied with the work.

Earlier I referenced a study where victims of sexual harassment came to view all farms as the same, such that they believed changing jobs would make no difference in preventing further sexual harassment—it was going to happen. If EFI-certified farms like Cardinal are successful in protecting employees from pesticides and eradicating sexual harassment from the fields, what effect do the successive negative past employment experiences—where employee safety was not managed, and employee abuse was tolerated—have on safety perceptions at their current employer?
A couple workers mentioned that new hires sometimes cannot understand the progressive management style at Cardinal and quit. Others who worked at the ranch for six months or less said in interviews that they viewed Cardinal as the same as other ranches. This raises the question whether the existing training for new hires is sufficient for employees to understand and recognize the benefits of being employed by Cardinal? Taken together, these questions suggest that research on understanding how employee perceptions, attitudes, and risk assessment are developed and change between ranches could be beneficial to ensure both employee and employer receive the rewards and benefits from this type of management.

**Impact on Personal Life**

While it is undeniable that working conditions are improved and the treatment is more humane at this ranch, one point to consider to what extent does working in a culture like this change how life is experienced outside of the ranch. For instance, how would it change relational dynamics at home for a woman to be empowered and experience greater levels of gender equity and autonomy while at work, if at the same time her partner continues to work for an employer where employees—particularly women—are not valued. Another facet to look at is whether the progressive treatment that is being provided on the ranch is helping workers to navigate life in the United States more effectively, or if at the same time is losing a small part of their native culture, values, or beliefs. In other words, what, if any, unintended consequences or benefits may employees experience in their personal lives as a result of participation at a progressive employer like Cardinal Ranch?
Equitable Food Initiative Model

The Equitable Food Initiative is an innovative partnership that aligns the interests of all stakeholders to improve grower performance, working conditions, and food safety for vendors and customers. It would be beneficial to see if this model of bringing together diverse interests can be replicated and applied in other industries or vulnerable populations.

Practitioner Implications

Sexual Harassment Prevention

At a practitioner level, I believe that Cardinal is doing a good job in addressing sexual harassment risk. Employees and supervisors are trained in sexual harassment, and a strong policy against sexual harassment is in place which gives employees a number of options to report acts of sexual harassment, including reporting it to the female ranch manager or female human resource officer that is in another office, or anonymously to an email account. Having options to report harassment is important given that female employees may be reluctant to report these experiences to male supervisors.

Where I believe this could be improved is that while employees have the option of reporting harassment to the female ranch manager, employees indicated that they rarely
see her in the fields. Otherwise, female field workers are supervised by a male crew leaders who report to other males. This leaves the responsibility for monitoring and preventing sexual harassment in the fields to men, when sexual harassment and assault are abuses of power and opportunity that occur in isolation. Therefore, integrating women more into the supervisory and leadership structure of the ranch would enhance monitoring, and provide fewer opportunities for instances of abuse to occur in isolation. Furthermore, employees may feel more comfortable addressing sexual harassment issues with a female supervisor they know than someone they do not know or never met. These considerations are important given the vulnerability of the population.

**Improving Employee Safety Training**

Maggie said that employees often seem bored in safety training and do not pay attention. One possible solution may be to employ more hands on and active learning techniques that do not resemble classroom instruction. This could further be implemented in a way to help employees learn to more accurately assess the safety risks that affect them. For instance, pesticide safety protocols may establish distance requirements for which people must stay away from chemical applications. Rather than tell employees to keep 100 feet or 200 feet away, it may be helpful to conduct a training exercise to ensure employees are able to accurately estimate the distance. For instance, a game could be developed where employees are asked to stand where they think a certain distance away in feet is, with a prize going to the employee whose guess is the closest to being correct. A rope cut in the correct length could then be used to teach employees the correct distance and to identify a winner. A rope in that length could further be stored with each crew if employee concerns about safe distances should arise in the future.
Likewise, safety protocols may include specifications based on the speed and direction of the wind. Trailers could be fitted with inexpensive weather stations and employees taught how to check wind conditions. Therefore, if a question should arise about whether or not the conditions are right for spraying, employees can check for themselves, thereby building confidence that safety protocols are being followed and providing verification if they are not. I think these types of training activities will not only help the employees to accurately assess safety risks, they will engender confidence in their own personal safety and in their employer.

Other Safety Management Practices

Operations that hire external contractors to perform pesticide treatments may benefit from ensuring that the vendor’s philosophical commitment to employee safety is aligned with the organizations. For ranches where legal status is an issue, care should be exercised to ensure that the employees responsible for overseeing this work can do so without fear of retaliation.

Recognition and Retention

Many of the ideas being experimented with by the operation to improve employee retention cost money, when recognizing employee achievement costs little or nothing to do but can increase employee satisfaction with their work. Whatever recognition provided should align with the organization’s goals and be meaningful to the worker. In this case, the organization values quality and food safety and workers derive satisfaction from being seen as champions who are good at their job. An example of the type of recognition that could be employed is a crew leader could declare an employee a
champion for having little or no rejected product, or a new employee who reaches a certain milestone in terms of production one day.

This same logic could be applied to aligning the organizations goal of increasing employee retention with awarding something of value to the employee. In this case, there is obvious like and admiration by employees for ranch leadership who they see very little of. It could be particularly meaningful for employees if leadership took a moment to recognize employees for significant work anniversaries. For instance, it might be meaningful to an employee if Steve were to visit an employee in the field around their ten-year anniversary to thank them for their commitment to the organization.

**Work Interruption Savings Accounts**

The problem of highly variable earnings due to the seasonality of agriculture is not only problematic for workers, it affects families, landlords, and service providers, and may be a potential source of turnover. One possible solution could be explore opportunities for employers to offer employees savings plans in which employees could set aside a portion of their pay during peak periods to be added to their pay in slow periods. Such an account would be similar to saving clubs already offered by other employers. An employer could encourage employee savings by offering matching contributions. If successful, this could alleviate a potential source of preventable suffering from variations in pay from earning less than $75 a day compared to up to $1,000. One obstacle to implementing the plan is the history of wage theft in agriculture. Therefore, great care would need to be taken to ensure that the money is guaranteed to be returned to the workers, and it may make sense to have a third-party administrator, rather
than leave it in the possession of an organization that could go out of business, be sold, or declare bankruptcy.

**Researcher Implications**

This project not only challenged me to question my own assumptions regarding how employment is experienced by workers, it reinforced the conviction that being treated with respect and dignity is not reserved for any echelon of workers but instead is a fundamental right we all have as humans. Therefore, I will continue to devote my life to work that is consistent with this principle.

I want this project to be a testimony for HRD practitioners and scholars to seek out opportunities to develop untapped human potential, wherever it resides in organizations and regardless of the perceived barriers in doing so. I remain infinitely humbled and grateful for the generosity of EFI, the ranch, and the employees for allowing me the extraordinary opportunity to get to know these wonderful employees and organization. The time I spent in the fields is a high point of my life. I want this research is just the first step in repaying their kindness. After graduation, I hope to continue to serve this community by offering low-cost human resource consulting services to farms seeking to improve working conditions.

**Chapter Summary**

Upon reflection on the literature and research question, it was concluded that the employer is fully committed to offering optimal working conditions, and the conditions offered are likely to greatly exceed industry norms. However, structural barriers beyond the firm’s control mean that workers still suffer from their work, and therefore the work cannot be truly considered optimal. Sources of suffering include the potential for
seasonal work interruptions when employees may have no source of earnings for 16 weeks, on average, and face potential homelessness and not being able to feed themselves and their families. Workers are also concerned about pesticide exposures, and long hours coupled with pain from stooping couple to diminish quality of life outside of work and limit opportunities to improve their situations and achieve the American dream.

Policy implications include removal of structural barriers preventing workers from earning a stable and living wage and continuing to develop sustainable agriculture techniques which may reduce or eliminate pesticide exposure and musculoskeletal injury. While extension offices can help prepare workers to adapt to technology during this period of rapid change; a portion of the agricultural workforce is likely to be displaced from agriculture work completely and will need job training to do something else.

The findings raise the question if employees are conditioned through a series of negative workplace experiences such that they may not fully experience the benefits of improved management and supervision. Therefore, research to understand how employee perceptions, attitudes, and risk assessments are developed and change between employers could be beneficial to employers and employees alike. It would be interesting to see if this progressive management style has unintended effects in the personal lives of workers.

At a practitioner level, sexual harassment prevention may be improved by incorporating more women into the field management structure. Safety training can be enhanced by more hands-on instruction and less classroom training. One low-cost strategy to increase retention is simply to recognize workers more for their achievements and tenure with the employer given this seemed like something employees wanted more
Lastly, it would be beneficial to see if employees could be offered savings accounts so they can set aside a portion of piecework earnings during peak season that they can withdraw from during slow periods. The employer could promote saving by offering a match.
REFERENCES


California Department of Industrial Relations. (2018). *Title 8*. Retrieved from https://www.dir.ca.gov/Title8/sb7g2.html


http://www.pewhispanic.org/2015/11/19/more-mexicans-leaving-than-coming-to-the-u-s/


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Wage and Hour Division


CURRICULUM VITAE

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EDUCATION

Ph.D. in Human Resource Development (GPA 3.8/4.0)      May 2019
Educational Leadership and Organizational Development Program, University of Louisville
   Dissertation: Eyes in the Field, a Seat at the Table, a Voice at the Ranch: A Study on Farm Labor Conditions.
   Advisors:  Drs. Jeffrey Sun and Meera Alagaraja
   Defense:   April 2, 2019

M.S. in Human Resource Education (GPA 3.9/4.0)          2011
Workforce and Human Resource Education Program, University of Louisville
   Awards:    R. Wayne Pace Award in Human Resource Education
               Graduate Dean’s Citation

B.S. in Economics                                      2002
John E. Walker Department of Economics, Clemson University

PROFESSIONAL CERTIFICATION

Senior Professional in Human Resources (SPHR)           2017–Present
Human Resource Certification Institute, Alexandria, VA

RESEARCH GRANTS

Graduate Student Council, University of Louisville, $300  2016
Research and Faculty Development Grant, University of Louisville, $1,145  2015
Vice Provost, University of Louisville, $1,000        2015

ACADEMIC EXPERIENCE

ONLINE TEACHING

Part-Time Lecturer                                   2014–Present
University of Louisville, Human Resource and Organization Development,
   Organizational Leadership and Learning, and Engineering Management Programs.
Instructed a diverse population of military and other adult students.

Taught thirteen asynchronous sections as instructor of record, two asynchronous courses as co-instructor of record, and two as teaching assistant.

Developed curriculum and assessments for Needs Assessment and redesigned course as lead instructor to integrate survey and related statistical methods and proposed updated course as a general education course meeting the quantitative reasoning requirements.

**Courses Taught**

*University of Louisville, Human Resource and Organization Development, Organizational Leadership and Learning, and Engineering Management* degree programs. *(4.2/5.0 Average competency, student course evaluations)*

- **Managing Projects in the Workplace (ELFH 341)**<sup>4,5</sup> 2018
- **Needs Assessment (ELFH 311, ten sections)**<sup>6,7</sup> 2015–2018
- **Workplace and Information Ethics (ELFH 578)**<sup>1,8</sup> 2016
- **Human Resource Management (EM 624)**<sup>9,10</sup> 2014
- **Organization Change and Consulting (ELFH 664)**<sup>11,12</sup> 2014
- **Evidence-Based Research in HROD (ELFH 617)**<sup>6,7</sup> 2014
- **Diversity in the Workplace (ELFH 414)**<sup>2,4</sup> 2013

**Teaching Preparation**

*Delphi U (Online teaching development), University of Louisville* 2013

*Graduate Teaching Assistant Academy, University of Louisville* 2013

**Teaching Award**

*Faculty Favorite, Delphi Center, University of Louisville* 2018

**RELATED ACADEMIC EXPERIENCE**

**General Education Assessment Coordinator and Graduate Service Assistant**

2014–2018

*University of Louisville, Undergraduate Affairs, Provost’s Office*

- Planned, coordinated, and implemented all aspects of the general education assessment process to ensure compliance with state and accreditation standards.

- Recruited, trained, supervised and processed compensation for faculty readers. Supervised student workers.

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<sup>4</sup> Instructor of record.

<sup>5</sup> Asynchronous undergraduate course.

<sup>6</sup> Instructor of record.

<sup>7</sup> Asynchronous undergraduate course.

<sup>8</sup> Asynchronous undergraduate/graduate course.

<sup>9</sup> Co-instructor of record.

<sup>10</sup> Asynchronous graduate course.

<sup>11</sup> Teaching assistant.

<sup>12</sup> Hybrid asynchronous/synchronous graduate course.
• Collected and analyzed quantitative and qualitative assessment data, and prepared and edited assessment reports for a variety of audiences including faculty, university administration, state, and accrediting body.

**Research and Teaching Assistant**  2011–2014  
*University of Louisville, Organizational Leadership and Learning Program*  
• Performed content analysis, standards alignment, and curriculum design for the Career and Technical Education concentration.  
• Conducted needs assessment for program expansion, literature review on competency-based education, edited program blog and managed social media, and developed online orientation for new students.  
• Supported faculty publishing-related activities.

**Athlete Tutor**  2009–2011  
*University of Louisville, Olga S. Peers Academic Center*  
• Tutored student athletes in composition, economics, psychology, and statistics.

**Writing Consultant**  2010  
*Jefferson Community and Technical College, Writing Center*  
• Supported a diverse student population in all stages of the writing process.

### HUMAN RESOURCE PROFESSIONAL EXPERIENCE

**Human Resource and Benefits Manager**  2005–2008  
*True Home Value, Louisville, KY*  
• Developed and administered human resource and personnel policies and procedures, including employee handbook. Trained and developed divisional payroll personnel in human resource policies, safety, and compliance. Recruited key staff.  
• Administered employee health, dental, life, disability, flexible spending, and Consolidated Omnibus Budget Reconciliation Act (COBRA) policies. Served as plan administrator for 401(k) with $11M in plan holdings. Administered the workers compensation program.  
• Managed the due diligence process during the acquisition of the corporation.  
• Ensured compliance with all federal, state, and local employment laws.  
• Trained and developed divisional personnel tasked with managing the day-to-day human resource operations for over 650 employees in sales, installation, and unionized manufacturing environments.

**Administrator and Project Manager**  2004  
*Shalimar Homes, Anderson, SC*  
• Led all aspects of hiring, scheduling, compensating, and supervising employees, subcontractors, and vendors for luxury home builder.  
• Monitored project and contract performance and maintained financial records.  
• Served as liaison between subcontractors, vendors, and homeowners.
PUBLICATIONS & PRESENTATIONS

JOURNAL ARTICLES

Recipient of the AHRD Elwood F. Holton, III Research Excellence Award 2018

Wiggins-Romesburg, C. (In process). Reaching the hands that feed us: A look at human resource development and the invisible and often forgotten workers that harvest produce. [Anticipated resubmission 1/2019 to New Horizons in Adult and Continuing Education]

EDITED BOOK CHAPTER

CONFERENCE PRESENTATIONS


**ENGAGEMENT & SERVICE**

**Reviewer, Human Resource Development Review** 2015–Present


**President, SHRM, University of Louisville Chapter** 2012–2013

**Representative, Graduate Student Council, University of Louisville** 2012

**Representative, CEHD Grad. Student Association, University of Louisville** 2010–2011