

Pepperdine University
Pepperdine Digital Commons

Theses and Dissertations

2023

Psychological safety within an agricultural hand labor harvest crew and its relationship to productivity

Thomas Draper

Follow this and additional works at: https://digitalcommons.pepperdine.edu/etd

Part of the Organization Development Commons

PSYCHOLOGICAL SAFETY WITHIN AN AGRICULTURAL HAND LABOR HARVEST CREW AND ITS RELATIONSHIP TO PRODUCTIVITY

A Research Project

Presented to the Faculty of

The Graziadio Business School

Pepperdine University

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

In

Organization Development

by

Thomas Draper

December 2023

© 2023 Thomas Draper

This research project, completed by

THOMAS DRAPER

under the guidance of the Faculty Committee and approved by its members, has been submitted to and accepted by the faculty of The Graziadio Business School in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE IN ORGANIZATION DEVELOPMENT

Date: December 2023

Faculty Committee

Committee Chair, Miriam Y. Lacey, Ph. D.

Committee Member, Ann E. Feyerherm, Ph. D.

Deborah Crown, Ph.D., Dean The Graziadio Business School

Abstract

Does psychological safety exist in Hispanic agricultural hand labor harvest crews? The purpose of the study was to ascertain the existence of the four stages of psychological safety in three agricultural hand labor harvest crews in California and to determine if those crews exhibiting the highest mean of psychological safety are the most productive in terms of pounds per person per hour packed. A protocol consisting of 17 statements was verbally administered in Spanish to the participating crews harvesting the same crop and working for the same Farm Labor Contractor. Analysis utilizing a 5-point Likert scale determined which crew exhibited the highest level of psychological safety. This was compared with harvest data to determine if the crew with the highest level of psychological safety was the most productive in terms of pounds packed per person. The practical application of this data allows agricultural employers to begin to study how psychological safety training and adoption can improve productivity and efficiencies to lower labor costs.

Keywords: psychological safety, productivity, agricultural training

Table of	of (Con	tents
----------	------	-----	-------

ABSTRACT	
TABLE OF CONTENTS	IV
LIST OF TABLES	v
CHAPTER 1: INTRODUCTION	1
CHAPTER 2: LITERATURE REVIEW	4
CHAPTER 3: METHODOLOGY	
Research Site and Sample	
Phase 1	
Phase 2	
Phase 3	
Phase 4	
Phase 5	
VOLUNTEER SELECTION CRITERIA	
CHAPTER 4: RESULTS	
CHAPTER 5: CONCLUSION	25
SUMMARY	
Future Research	
LIMITATIONS	
RECOMMENDATIONS TO OD PRACTITIONERS	
Final Conclusions	
REFERENCES	
APPENDIX A: RESEARCH INSTRUMENTS	

List of Tables

Table 1. Crew Composition Data	16
Table 2. Crew Psychological Safety Indices	17
Table 3. Foreperson Safety Indices (Crew)	20
Table 4. Crew vs. Foreperson Safety Indices	20
Table 5. Foreperson Safety Indices (Organization)	21
Table 6. Crew 75 Harvest Data	22
Table 7. Crew 76 Harvest Data	
Table 8. Crew 131 Harvest Data	23
Table 9. ANOVA Results	24

Chapter 1: Introduction

California's agricultural economy produced 50 billion in farm sales in 2019 (Rural Migration News, 2021). Fresh market fruits, vegetables, and flowers sales approached \$14 billion. California agricultural producers paid \$11.4 billion in wages in 2014, accounting for over 20% of farm sales (California Agriculture, 2016). Of the \$11.4 billion spent, approximately \$5 billion was paid to farm labor contractors, custom harvesters, or other businesses that provide farm workers. The labor provided by farm labor contractors, both seasonal and permanent, provides most of the labor for California's high-value crop production.

California's fresh market production of high-value crops is in flux. Typical production patterns, including acres planted, yields, and profitability, have all been affected by lower consumption during the COVID-19 pandemic, the annual increase in the minimum wage, the state-mandated yearly reduction in the number of permitted workweek hours, the decreasing availability of seasonal labor for harvest, and diminishing supplies of water. These environmental factors have made fresh market fruits and vegetables more difficult and expensive for California growers to produce. While mechanization is a potential solution to lower costs for less perishable crops like nuts or cut and bagged vegetables, most items in the produce section require seasonally employed hand labor to harvest, grade, sort, pack, and deliver the product to market. Those costs have continued to increase.

Typically, harvest employees work for a guaranteed hourly wage or a piece rate. Growers or farm labor contractors (FLC) assemble individuals to form a crew. The crew's direct supervisor is known as a foreperson. Typical harvest crews can vary between 20 and 40 individuals. They are commonly comprised of individuals who know and have previously worked with the foreperson or know someone in the crew. Forepersons often play a pivotal role in determining who becomes a member of their crew.

In California, several recent policies about overtime and minimum wage have increased the costs for growers. On January 1, 2023, California's minimum wage increased to \$15.50 per hour for all employers. Employers with 25 or fewer employees have a workweek maximum of 50 hours, or nine hours per day, with overtime paid after those totals are met. Employers with 25 or more employees have a workweek maximum of 40 hours, or eight hours per day, with overtime being paid when these totals are met. By January 1, 2025, employers with 25 or fewer employees will be required to pay overtime after 40 hours per week. As the minimum wage increases and the number of hours before overtime is paid declines, costs per unit harvested invariably increase. Growers want to know their harvest costs per unit and prefer employees to work by piece rate, understanding they will earn at least minimum wage. If the employee does not harvest the minimum amount of product to earn minimum wage, their pay will be adjusted to equal minimum wage. An unintended consequence of the piece-rate system is that the quality of the finished harvested product typically declines due to the speed workers are trying to utilize to increase their hourly wage. As minimum wage increases, employees have no incentive to work faster if paid by the hour and little incentive to maintain quality standards if paid by piece rate.

As a result of increased labor costs, California fresh market growers have adjustments to make. Adjusting to higher labor costs includes encouraging the adoption of farming practices to utilize more mechanization to reduce the need for hand labor where possible. Harvest aids enabling increased efficiencies will continue to be adopted (Martin & Calvin, 2011).

The purpose of this study is to investigate if crew productivity of the packed product can be influenced by how psychologically safe the crew feels as determined by their responses to statements, specifically regarding inclusion, learner, contributor, and challenger safety. Each team will be compared regarding productivity as measured in pounds packed per person per day. The protocol results will be analyzed after determining which team has produced the highest daily pounds packed per individual per hour. The analysis will look for any correlation between crew productivity and how psychologically safe they feel working as a crew. The study will also compare the foreperson's answers to their crews to measure similarities or differences to help explain the results. The research question, hypothesis, and design are summarized below:

- **Research Question:** Does the level of psychological safety the crew feels directly relate to increased productivity?
- **Research Hypothesis:** The crew exhibiting the highest level of psychological safety will pack the most peppers, determined by the number of packed pounds per person per hour.
- **Research Design:** Using a 5-level Likert Scale, data was collected utilizing a voluntary interview process among three harvest crews to measure the level of psychological safety within each crew. During the same time, data was collected to measure the number of pounds per person per hour packed by each crew for 10 days.

Chapter 2: Literature Review

Schein (1999) is known for his work in Organizational Development and his model of organizational culture. He identified three distinct levels in an organization's culture: artifacts and behaviors, espoused values, and assumptions. By studying each level in a particular organization, one can ascertain what is considered essential and critical to the organization's functionality. While FLCs are comprised of these three levels, how they are portrayed and understood by the ownership, management, supervisors, office staff, and field staff would likely differ. Artifacts and behaviors are the most visible and accepted organizational elements observed by the outside world and create the organization's first impression. These include visible organizational structures and processes. For an FLC, this might consist of their logo, the identifying colors, cleanliness and orderliness of their pickups, and how well they police their worksite for plastic bottles, cans, and trash. In addition, it includes the management structure and the role played by supervisors, forepersons, and training personnel.

Espoused values are the strategies, goals, and management philosophies the organization endorses, promotes, and demonstrates publicly. These include the organization's mission statement, goals, and values. They are the official statements and attitudes of the organization to be posted in conspicuous places for both employees and visitors alike.

Assumptions are the unconscious beliefs within the organization that members hold to be true. These are the unspoken beliefs and difficult-to-articulate elements held by those employees working for the organization. These include perceptions, thoughts, and feelings, the ultimate source of values and action (Schein, 1999). "For example, a company espousing teamwork does not necessarily operate from a deep assumption that teams are better. In fact, the irony is that you often find that the espoused values reflect the areas in which the organization is particularly ineffective because it operates from contradictory tacit assumptions" (Schein, 1999, p. 62).

Edmondson (2019) explains psychological safety as "setting the stage for a more honest, more challenging, more collaborative and thus also more effective work environment" (p. 18). Feeling psychologically safe allows for setting ambitious goals and working towards their achievement together as a group. There are four stages of psychological safety.

- Inclusion safety identifies you as feeling like a member of the group or team.
- Learner safety allows you to ask questions within the group without criticism or demeaning comments from other group members.
- Contributor safety, which encourages you to contribute your ideas or opinions to those in charge without the fear that your ideas or suggestions will be ignored and or not acknowledged.
- Challenger safety, which allows you to challenge the current process or method of operating without fear of retribution. It also entails accepting failures and utilizing them as powerful learning experiences.
- The four stages can be explained by defining behaviors that align with definitions of respect, permission, and an actionable social exchange to help explain how psychological safety can be identified in the group (Clark, 2020).

Dialects, cultural heritage, and previous experience all contribute to being included. However, no matter how inclusive the culture is, past experiences, observations, foreperson training, and team dynamics can be critical in how crew members are viewed and treated inclusively or not Hofstede Insights (2023). Learner Safety is critical in agricultural harvest labor crews. Harvest standards are emphasized regularly and the crew must understand the expected quality and production standards. The ability to communicate and ask questions between the crew and foreperson is necessary for the crew to achieve and maintain the standards expected of them.

Previous research indicates that a bureaucratic structure is designed for productivity and control and is inappropriate for creativity (Thompson 1965). Agricultural labor crews are organized and bureaucratic, with a top-down management hierarchal structure to ensure control and productivity. Can Contributor Safety be present or accepted within a typical agricultural harvest labor crew with this organizational structure?

Lastly, providing an environment where challenger safety exists requires the foreperson to be open, willing, and humble enough to admit they do not have all the answers and are eager to listen and exchange information regarding new or different ways of doing the same job. They must be willing to allow individuals to speak candidly and protect them from harassment or ridicule from their fellow employees if necessary.

Psychological safety in work teams is most often referred to in the literature regarding groups of individuals tasked with improving, solving, changing, inventing, or managing a product, process, or technology. Little or no research has been done on the existence or influence of psychological safety in agricultural labor and the constant challenges they face to improve performance and reduce costs. What all these teams have in common are varying degrees of expertise, education, diversity, and skills. In addition, they face daily interpersonal risk in trying to help themselves, their teams, and their organizations learn Edmondson (2003).

Edmondson (2003) argues that individuals face four specific risks to their image within the group by behaviors through which individuals and groups learn. These are being seen as ignorant, incompetent, negative, or disruptive. Asking a question may portray the individual as ignorant. Asking for help or pointing out mistakes may be described as incompetent or disruptive. Individuals must often reflect on their current and past performances and their teams to improve. However, the fear of being perceived as negative usually stops individuals from delivering essential assessments of the individual's and group's performance. Lastly, the fear of being seen as lacking self-sufficiency and being intrusive often limits and prevents the individual from offering input and the possibility of hearing something they do not want to hear.

Can Hispanic agricultural field laborers be brought together temporarily for the purpose of doing a repetitive job such as harvesting, packing, stacking, or loading and adopt or accept the philosophy of psychological safety? Are they willing or able to engage in learning behaviors that could threaten the images their fellow teammates have of them (Edmondson, 2003)?

Edmondson (2003) considers psychological safety to be different from the concept of interpersonal trust. She describes team learning as an iterative process of action and reflection. She argued that "compelling goals are necessary to motivate this deliberate, effortful process" (Edmondson, 2003, p. 257. She argued that there is no clear motivation or direction to strive without goals. The risks of doggedly pursuing the stated goal are too significant without psychological safety. The team leader must be responsible for strengthening and encouraging the collective learning process by fostering psychological safety and setting team goals. Future research should include teaching the team leader how to set realistic and achievable goals to improve creativity and performance in agricultural labor crews.

Psychological safety consists of employees' perception of taking personal risks in their work environment and their consequences. It includes their assumptions about how others will respond when they step up to ask a question, report a mistake, ask for personal feedback, or suggest a new idea. Edmonson (1999) believes everyone engages in micro-behavioral decision points by analyzing the interpersonal risk associated with any given behavior. In addition, psychological safety provides a climate where the group can focus on productive discussion and achieving shared goals rather than individual self-protection.

While psychological safety has typically been studied and studied and researched in predominately Western organizational cultures where teamwork, innovation, and creativity are the keys to success, survival, profitability, and efficiency, more research needs to be done on how psychological safety interacts with the Hispanic culture as it relates to agricultural labor.

According to Hofstede's (2023) comparison tool, Mexico and the United States differ significantly in three critical cultural dimensions: Power Distance, Individualism, and Uncertainty Avoidance. The United States scores 40 in Power Distance, while Mexico scores 81. When dealing with individuals with a higher ranking in Power Distance, they tend to express respect to anyone senior in rank or age. It is accepted that power is distributed unequally and ascribed that you cannot lose it once attained (Hofstede's Insights, 2023). In Hispanic harvest crews, this can be interpreted as the foreperson being in charge with considerable power to hire and fire and responsibility for the implementation of harvest instructions and company policy.

In Individualism, the United States has a score of 80, while Mexico has a score of 34. The lower score indicates that those individuals put the group's interests above their own. Status and maturity are valued. Status is conferred upon the foreperson and their assistant. It suggests that values for those belonging to the in-group and those who do not are different. Loyalty is appreciated and often takes precedence over most other societal rules (Hofstede's Insights, 2023). Within agricultural harvest crews, group cohesiveness and feeling part of the group contribute to the crew's well-being and how well they can function to achieve harvest objectives.

Lastly, the score for Uncertainty Avoidance in the United States is 46, while for Mexico it is 82. The higher score indicates there is an inherent need for rules and order to make the future as predictable as possible. Members of this group do not readily accept change and are typically risk averse. There is an emotional need for rules, regulations, and policies to minimize uncertainty (Hofstede's Insights, 2023). In harvesting operations, this includes daily instructions regarding acceptable standards for harvesting and packing. In addition, organizational rules and safety procedures are constantly stressed and implemented.

When dealing with crew dynamics and productivity, these three dimensions may play a significant role in how an organization and crew leader can incorporate and implement psychological safety into their crew. A change in thinking is required for a farm labor contractor to manage its organizational structure as defined by Schein (1999), utilizing artifacts and behavior, espoused values and assumptions while attempting to implement psychological safety and, at the same time, overlaying Hofstede's (2023) three critical differences in Individualism, Uncertainty Avoidance, and Power Distance with the expressed goal of improved performance, creativity, innovation, and job satisfaction. Leadership is crucial for the implementation of psychological safety. Edmondson (2019) created a list of tools to build psychological safety within an organization and individual teams or crews. How these tools can be implemented in an agricultural organization is a question for future research.

Chapter 3: Methodology

Research Site and Sample

The research site, located in the Coachella Valley, California, was in a field of red bell peppers being harvested by the three crews selected to participate in the study as proposed by the FLC, who agreed to allow access to his crews. The individuals who participated were chosen from these three crews for three consecutive days, with one crew being interviewed daily. Please refer to Appendix A for the research instruments used in this study.

Phase 1

A survey instrument was created to measure the four levels of psychological safety utilizing a 5-point Likert Scale. An FLC was identified who allowed his crews to be interviewed while performing their harvest duties. The FLC permitted access to multiple crews harvesting the same crop utilizing similar packing equipment and allowed a non-Hispanic outsider to investigate the existence of psychological safety in a way not previously studied.

Phase 2

A structured interview was designed and administered to various harvest crews and their forepersons from one FLC. The survey instrument was administered verbally in person and in Spanish, and the answers were manually recorded. This method was chosen to reduce the bias of illiteracy and language barriers and ensure consistency and minimal discussion between participants. Those crew members and the assistant foreperson interviewed responded to the same 17 statements. The foreperson for each crew responded to an additional 13 statements utilizing an identical Likert scale. The interviews took place under a portable shade structure away from the crew so that no other crew member heard any other interviewee's responses.

Phase 3

Data on each crew's harvesting quantity was collected for 10 days. The harvest data was organized over the same 10-day period for each crew. The data collection began on the first day of the interviews and continued for the next 10 days of harvest. Harvest and quality control data were collected Monday through Friday, and if one crew was selected to harvest on Saturday that data was not collected. Each crew was anticipated to harvest red bell peppers for the 10-day window assigned for data collection. However, due to market or field conditions and upon the grower's and FLC's decision, one or more crews were switched to harvesting green bell peppers. The data analysis reflected this change.

Phase 4

Harvest productivity data for each crew was compared to their responses to the interview statements to ascertain any correlation between the level of psychological safety within the crew and their productivity. The data was obtained from the participants in each crew. Each crew was numbered for identification purposes, and the data was entered into a Google spreadsheet. Each crew was analyzed to determine an average based on a Likert scale from 1 = strongly agree and 5 = strongly disagree. Each crew received a composite average for the Inclusion, Learner, Contributor, and Challenger Psychological Safety categories.

Phase 5

Data was analyzed to determine which crew had the highest psychological safety average. Each crew's average pounds per person per hour packed was calculated for the 10 days and data were collected before and after the interview. All data was compared to determine any correlation between the level of psychological safety exhibited by a particular crew and the productivity of its packed product. Participation was voluntary, but crew members aged 19 years or older were expected to participate depending on the number of crew members and the time allocated for harvesting. All crew job titles were interviewed, including the foreperson, the assistant foreperson, packers, box makers, and appliers of PLU stickers. All responses were registered using a five-point Likert scale. The crew's responses to the interview statements were compared to determine which team exhibited higher characteristics of psychological safety as determined by the lowest composite average of the four components of psychological safety.

Performance data was analyzed by comparing the pounds of fruit packed daily to determine if there was a correlation between the degree of psychological safety felt by the team as determined by their responses to the questionnaire and their productivity. The total number of pounds packed daily divided by the number of crew members divided by the number of hours worked generated by this measurement.

The foreperson, assistant foreperson, and forklift driver were not included in the calculation, as they do not directly contribute to the number of pounds packed per person hour. Each crew was interviewed on a different day, with daily harvest volumes tracked for 10 days. Each crew was measured while working in the same field and harvesting similar products.

Volunteer Selection Criteria

The following were the steps to ensure all participants who voluntarily participated were 19 or older.

 TGH, the Farm Labor contractor, employed three red bell pepper harvesting crews utilizing field pack methods on a similar packing table. All crew members above 19 years old were recruited to participate. A supervisor introduced me to each crew. I was identified as a researcher completing his master's degree to gather data regarding crew behavior. He verbally asked for participation from all employees older than 19 years. The supervisor explained that participation was voluntary and confidential, as no names were registered. He emphasized that I was not from the Department of Immigration or the State of California.

- 2) Informed consent was documented with each participant. Each participant verbally consented to the interview process after the conditions of participation were discussed, including the potential risks, their ability to end the interview process if they felt uncomfortable, and the reasons for the research. The same 17 statements were read in Spanish to all employees who participated, and all verbal answers on the interview statement protocol for that individual were documented. Responses were transcribed manually on the protocol, not utilizing a recording device. No names were registered; the only identifying information was gender, age, and job classification. No blank interview documents were given to the participants to avoid embarrassment for subjects who cannot read. Instead, each respondent was assigned a consecutive number on their questionnaire to track the number of participants and calculate the participation percentage in each crew. All interviews took place under a portable shade structure outside of earshot of other employees to ensure confidentiality. All employees continued to be paid during their time with me. Interviews for crew members took a maximum of 15 minutes per individual and occurred only once.
- 3) The interview process also included forepersons. Their questionnaire consisted of 30 questions about their crews and their organization. All verbal responses were manually annotated on the foreperson's interview protocol and not using a recording device. The

interview process for the foreperson took up to 25 minutes and occurred once. The foreperson received their regular pay during the interview process.

- 4) Crews worked near one another to ensure the similarity of harvest conditions.
- 5) Crew members earned the same minimum wage per hour and the same box bonus per harvested box. However, no additional pay was provided to those participating in the interview process.
- 6) Red bell peppers are typically harvested five to seven times during the spring harvest. To ensure an accurate comparison between crews, each crew was interviewed during similar harvest conditions.
- 7) Each crew was interviewed during one day of harvest, which was specified for them, but productivity data was gathered for each crew during the same two-week period. Harvest data worksheets and quality control worksheets are available in the attachments.

Chapter 4: Results

Crew 75 was interviewed on June 12, 2023. On that day, there were 51 employees, including the foreperson, assistant foreperson, and forklift driver. In total, 35 employees and the foreperson were interviewed during the eight hours of harvest. The male foreperson supervised the harvesters, while his wife, the assistant foreperson, supervised the packers.

Crew 76 was interviewed on June 13, 2023. On that day, there were 55 employees, including the foreperson, assistant foreperson, and forklift driver. In total, 29 employees and the foreperson were interviewed during the eight hours of harvest. The foreperson was female, and she supervised the packers while the male assistant foreperson supervised the harvesters.

Crew 131 was interviewed on June 14. On that day, there were 45 employees, including the foreperson, assistant foreperson, and forklift driver. Only 19 employees and the foreperson were interviewed during the six hours of harvest. The male foreperson supervised the harvesters, while his wife, the assistant, supervised the packers.

The average age for each crew and the breakdown of which job positions were interviewed are shown below in Table 1.

Table 1

		Crew 75	Crew 76	Crew 131
Number		35	29	19
Gender	Male	13	13	8
	Female	22	16	11
Age	Mean	50.0	45.7	43.6
	Minimum	26	26	21
	Maximum	68	72	65
	Standard Dev	12.6	11.7	13.1
	Ν	33	29	19
Position	Packer	12	12	7
	Stacker	1	2	2
	putting stickers	1	0	0
	box maker	0	1	0
	paperwork and	0	0	1
	assistant forepe	0	1	1
	Harvester	21	13	8
	Total:	35	29	19

Crew Composition Data

Table 2 showcases the four dimensions of psychological safety with the mean responses for each crew as determined by descriptive statistics.

Table	2
-------	---

1=Strongly Agree, 5=Strongly Disagree	Crew 75		Crew 76			Crew 131			
	Mean	Std Dev	#	Mean	Std Dev	#	Mean	Std Dev	#
Inclusion and Safety Index	2.19	0.97	140	2.05	0.97	116	2.26	0.85	76
I like being a member of this crew	1.77	0.49	35	1.55	0.57	29	1.84	0.50	19
I knew the foreperson before I began working here	2.97	1.25	35	2.93	1.16	29	3.05	1.18	19
I feel respected as a member of this crew	1.77	0.69	35	1.69	0.66	29	1.89	0.32	19
Other crew members listen to me	2.03	0.75	35	2.03	0.73	29	2.26	0.56	19
Learner Safety Index	1.97	0.63	140	1.81	0.64	116	1.96	0.46	76
Harvest instructions are given daily	2.06	0.76	35	1.59	0.50	29	1.89	0.32	19
Questions are welcomed and appreciated	1.89	0.63	35	1.69	0.54	29	1.89	0.32	19
Questions are answered	1.80	0.53	35	2.00	0.76	29	2.05	0.62	19
I ask questions when I don't understand	1.91	0.56	35	2.00	0.65	29	2.05	0.52	19
Contributor Safety Index	2.40	0.86	140	2.02	0.66	116	2.13	0.65	76
I am able to offer suggestions on how to improve the process	2.57	0.95	35	2.21	0.82	29	2.32	0.75	19
My foreperson is open to listening to my suggestions	2.06	0.68	35	2.00	0.53	29	2.00	0.47	19
My foreperson asks questions about my suggestion	2.34	0.87	35	1.86	0.35	29	2.05	0.62	19
I am willing to offer other ideas in the future	2.43	0.88	35	2.14	0.79	29	2.21	0.71	19
Challenger Safety Index	2.55	1.04	175	2.68	1.10	145	2.58	1.01	95
Disagreements sometimes occur with the foreperson	3.29	0.99	35	3.55	0.99	29	3.53	0.84	19
Healthy disagreement can be productive	2.40	0.85	35	2.24	0.58	29	2.26	0.65	19
I am capable of disagreeing if necessary	2.49	0.98	35	2.83	1.04	29	2.74	0.99	19
I would disagree in the future if needed	2.60	1.03	35	2.76	1.02	29	2.68	1.00	19
I would work with this foreperson again in the future	1.94	0.94	35	1.59	0.73	29	1.68	0.48	19
Overall Safety Index	2.25	0.93	595	2.10	0.94	493	2.26	0.82	323
The number participating in sample			N=35			N=29			N=19

Crew Psychological Safety Indices

In the dimension of Inclusion Safety, Crew 76 had the lowest mean score of 2.05, indicating the crew was more inclined toward agreement with the statements that made up the Inclusion Safety Index. Crew 75 had a mean of 2.19 and Crew 131 had a mean of 2.26, indicating the crews were slightly less inclined toward agreement than Crew 76.

Regarding Learner Safety, Crew 76 averaged the lowest score and most agreement among the three crews with a mean of 1.81. All three crews had a mean score of slightly less than two, indicating the respondents were more in agreement than in strong agreement. Crews 75 and 131 were statistically even, while Crew 76 was almost 0.20 points lower. The Contributor Safety Index showed a much broader range in the mean between the crews than Inclusion or Learner Safety. Again, Crew 76 had the lowest mean average of 2.02. Crew 131 was slightly higher at 2.13, and Crew 75 was significantly higher at 2.40 and much closer to neutral.

Challenger Safety had the highest mean of any of the four indices of psychological safety. The means ranged from 2.55 to 2.69 for the five statements making up that index. There was widespread agreement that Challenger Safety, which allows for disagreement with the foreperson, seldom took place as demonstrated by the response to the statement, "Disagreements sometimes occur with the foreperson." For that statement, the mean values for the three crews ranged from 3.29 to 3.55, indicating that they disagreed that disagreements occurred. However, there was a similar consensus that healthy conflict can be productive, with mean values ranging from 2.24 to 2.40 for that statement. The ability to disagree in the present and the future also averaged closer to neutral rather than toward agreeing, with mean values between 2.49 and 2.83. Despite the neutral ratings of these statements, all three crews showed agreement about working for the same foreperson in the future, with averages between strongly agreeing and agreeing (1.59 and 1.94). This indicates that while the respondents were not willing or felt safe enough to disagree, they all felt comfortable working for the same foreperson again in the future.

For an overall Psychological Safety Index (combining all 17 statements), Crew 76 agreed the most, with the lowest mean of 2.10. Crew 131 had a mean of 2.26 and Crew 75 had a mean of 2.25. These were statistically different at a 99% confidence level.

There are some interesting differences between the foreperson responses and how each crew perceived the level of psychological safety as measured by their mean averages. For example, for Inclusion and Learner Safety, all three forepersons answered that they strongly agreed with all the statements defining those two dimensions. The three crews had a mean of slightly more than 2 for Inclusion Safety, indicating agreement, while for Learner Safety, their average was somewhat less than 2, indicating agreement but leaning slightly toward strong agreement.

Regarding Contributor Safety, the forepersons in crews 75 and 131 strongly agreed with the statements, rating each statement a 1 (out of 5). In contrast, the foreperson in Crew 76 also agreed but leaned more towards agreement, with a mean of 1.25. Crew 76 had a mean of 2.02, indicating agreement with the contributor's safety statements but differing substantially from its foreperson with a difference of 0.77 points.

Crew 75 had a mean average of 2.4, indicating less agreement and leaning towards neutral, again differing substantially from its foreperson with a difference of 1.4 points. In contrast, Crew 131 had a mean average of 2.13, indicating more agreement than its foreperson's 1.0 median average with a difference of 1.13 points.

Regarding Challenger Safety, the foreperson in Crew 75 had a mean average of 2.5, while the crew had a mean average of 2.55, indicating close alignment. In Crew 76, the foreperson had a mean average of 2.0 while her crew had a mean average of 2.68, which is a difference of .68, indicating she believed there was more Challenger Safety in the crew than they showed. Lastly, Crew 131 had a mean average of 2.58, while the foreperson's mean average was 1.75, the lowest among all crew forepersons but showing a difference of 0.83. Except for Crew 75, there was a disconnect between how the forepersons responded and how their crews responded to the existence of Challenger Safety within their crews.

Table 3 shows the foreperson safety indices in table form for Table 4 shows the crew vs. foreperson safety indices.

Table 3

Foreperson Safety Indices (Crew)

1-Strongly Agros 5-Strongly Disagros	Crow 75	Crow 76	Crow 121
I=Strongly Agree, 5=Strongly Disagree	Clew 75		
	Foreperson	Foreperson	Foreperson
Gender	Male	Female	Male
Age	Over 50	44 to 50	38 to 43
Years as a foreperson	21.00	10.00	15.00
Years as a foreperson with this company	7.00	5.00	0.08
Number of people 18 or over in your crew?	54.00	54.00	43.00
Inclusion Safety Index (Crew)	1.00	1.00	1.00
I like being the foreperson of this crew	1.00	1.00	1.00
I feel respected as the crew foreperson	1.00	1.00	1.00
The crew members listen to me	1.00	1.00	1.00
Learner Safety Index (Crew)	1.00	1.00	1.00
I give harvest directions to the crew every day	1.00	1.00	1.00
I regularly ask the crew if they have any questions	1.00	1.00	1.00
I welcome and appreciate questions	1.00	1.00	1.00
I answer all questions	1.00	1.00	1.00
Contributor Safety Index (Crew)	1.00	1.25	1.00
I am open to suggestions on how to improve the process	1	1	1
I ask questions about the suggestion	1	2	1
We discuss how best to implement the suggestion	1	1	1
I try to encourage new suggestions from the crew	1	1	1
Challenger Safety (Crew)	2.50	2.00	1.75
Disagreements sometimes occur with crew members	4	2	1
I believe it is healthy for employees to disagree	2	2	2
I welcome or encourage disagreement	2	2	2
I will continue to welcome disagreement in the future	2	2	2
*			
Overall Safety Index	1.40	1.33	1.20
The number participating in sample	N=1	N=1	N=1

Table 4

1=Strongly Agree, 5=Strongly Disagree	Crew 75	Crew 76	Crew 131	Crew 75	Crew 76	Crew 131
	Crew	Crew	Crew	Foreperson	Foreperson	Foreperson
Inclusion and Safety Index	2.19	2.05	2.26	1.00	1.00	1.00
Learner Safety Index	1.97	1.81	1.96	1.00	1.00	1.00
Contributor Safety Index	2.40	2.02	2.13	1.00	1.25	1.00
Challenger Safety Index	2.55	2.68	2.58	2.50	2.00	1.75
Overall Safety Index	2.25	2.10	2.26	1.40	1.33	1.20
The number participating in sample	N=35	N=29	N=19	N=1	N=1	N=1

Crew vs. Foreperson Safety Indices

Table 5 reflects the foreperson's responses related to the four stages of Psychological Safety as they perceive it in the organization's culture. Crew forepersons 75 and 131 answered strongly agree with all statements. Foreperson 76 answered strongly agreed 1.0 to Inclusion and Learner Safety and responded with a 1.75 to Contributor Safety and 1.5 to Challenger Safety. Interestingly, Crew 76 had the lowest mean average of 2.02 for Contributor Safety and the highest, 2.68, for Challenger Safety. In contrast, their foreperson had the highest mean averages for Learner and Challenger within the Organization.

Table 5

1=Strongly Agree, 5=Strongly Disagree	Crew 75	Crew 76	Crew 131
	Foreperson	Foreperson	Foreperson
Inclusion Safety - Organization	1.00	1.00	1.00
I like being a foreperson in this organization	1.00	1.00	1.00
My supervisors listen to me	1.00	1.00	1.00
I feel respected by the organization	1.00	1.00	1.00
Learner Safety - Organization	1.00	1.00	1.00
I receive harvest instructions every day from my supervisor	1.00	1.00	1.00
If I have questions I ask them	1.00	1.00	1.00
My questions are welcomed and appreciated	1.00	1.00	1.00
My questions are answered	1.00	1.00	1.00
Contributor Safety - Organization	1.00	1.75	1.00
My supervisors are open to receiving my suggestions	1.00	1.00	1.00
My supervisor has discussed my suggestion with me	1.00	2.00	1.00
My suggestions are welcomed and appreciated	1.00	2.00	1.00
I will continue to offer suggestions in the future	1.00	2.00	1.00
	1.00	4.50	4.00
Challenger Safety - Organization	1.00	1.50	1.00
My supervisors ask for my opinion	1.00	2.00	1.00
I am able to verbalize my opinion if it does not agree with my supervisor's	1.00	2.00	1.00
My supervisor is willing to converse about our different opinions	1.00	1.00	1.00
Based on my experience, I will continue to offer my opinion	1.00	1.00	1.00
		1.00	1.00
Overall Safety - Organization	1.00	1.33	1.00
The number particiapting in sample	N=1	N=1	N=1

Foreperson Safety Indices (Organization)

Table 6, Table 7, and Table 8 identify the crop being harvested, the number of workers daily, the number of hours worked daily, the number of boxes picked, the number of pounds packed, and the calculation of the number of pounds per person per hour each crew produced for the same 10-day period.

Table 6

Crew /5 narvesi Da

Crew 75 Harvest Data						
Date	Pepper Crop	Workers	Hours	Boxes	Pounds	lbs/per/hr
06-12-23	Red	51	407	2,675	49,025	2.36
06-13-23	Red	53	418	2,712	50,020	2.26
06-14-23	Red	51	308	2,078	38,050	2.42
06-15-0123	Red	51	405	2,255	47,835	2.32
06-16-23	Red	48	378	2,476	45,760	2.52
06-19-23	Red	48	384	1,737	39,255	2.13
06-20-23	Red	46	367	1,763	35,415	2.10
06-21-23	Red	46	278.5	1,300	23,670	1.85
06-22-23	Red	49	293.5	1,901	32,905	2.29
06-23-23	Red	48	290.5	1,886	32,290	2.32
Average		49.1	352.95	2,078	39,423	2.26
Minimum		46	278.5	1,300	23,670	1.85
Maximum		53	418	2,712	50,020	2.52
Std Dev		2.33	54.41	451.8	8,659.7	0.19
Number of harvest days (Red)	10					
Number participating in sample	N=35					

Table 7

Crew 76 Harvest Data

Crew 76						
Harvest Data						
Date	Pepper Crop	Workers	Hours	Boxes	Pounds	lbs/per/hr
06-12-23	Red	51	406	2626	48040	2.32
06-12-23	Red	52	413	2697	49155	2.28
06-12-23	Red	52	305	2097	39275	2.47
06-12-23	Red	51	406	2562	50540	2.44
06-12-23	Red	55	422	2596	49780	2.14
06-12-23	Red	50	396	1950	40160	2.02
06-12-23	Red	50	383	2091	38565	2.01
06-12-23	Red	53	346	2028	34570	1.88
06-12-23	Red	53	320.5	1828	31530	1.85
06-12-23	Red	55	332.5	1552	30880	1.68
Average		52.2	373	2202.7	41249.5	2.11
Maximun		55	422	2697	50540	2.47
Minimum		50	305	1552	30880	1.68
Std Dev		1.81	42.89	392.87	7649.21	0.27
Number of harvest days (Red)	10					
Number participating in sample	N=29					

Table 8

Crew 131						
Harvest Data						
Date	Pepper Crop	Workers	Hours	Boxes	Pounds	lbs/per/hr
06-12-23	Red	37	296	1600	30720	2.81
06-13-23	Red	45	355.5	1594	35050	2.19
06-14-23	Red	45	266.5	1321	28715	2.39
Average		42.33	306.00	1505	31495	2.46
Maximum		45	355.5	1600	35050	2.81
Minimum		37	266.5	1321	28715	2.19
Std Dev		11.66	36.69	204.85	5274.91	0.32
06-15-23	Green	40	315.5	1299	28520	2.25
06-15-23	Green	43	343	1384	32500	2.20
06-19-23	Green	37	296	1310	31700	2.89
06-20-23	Green	39	307	1146	19125	1.59
06-21-23	Green	41	323	1275	26065	1.96
06-22-23	Green	44	329	1367	27665	1.91
06-23-23	Green	38	230.5	795	19875	2.26
Average		40.29	306.29	1225.14	26492.86	2.15
Maximum		44	343	1384	32500	2.89
Minimum		37	230.5	795	19125	1.59
Std Dev		2.56	36.69	204.85	5274.91	0.40
Number of harvest days (Red)	3.0					
Number participating in sample	N=19					

Crew 131 Harvest Data

Crew 131, while only picking red bell peppers for three days, had the highest pounds per person per hour productivity, with a 2.78 average. Crew 75 had the second highest pounds per person average, with 2.26 pounds per person per hour. Crew 76 had the third-highest average, with 2.10 pounds per person per hour. Even with the few days of data for Crew 131, these numbers were just outside of marginal significance at p = .103.

Interestingly, the crew with the highest average number of workers per day, Crew 76, did not show the highest productivity, although they showed the highest average pounds packed daily. It is impossible to compare picking and packing green bell peppers to red bell peppers because green bell peppers are typically volume-filled in boxes weighing 25 pounds while reds are placed packed in 15 and volume-filled 25-pound boxes. Placed-packed boxes require PLU stickers, while volume-filled containers do not, thus reducing the time to pack. In addition, Crew 131 had the lowest average of daily workers of all three crews.

Table 9 illustrates significant differences between crews in Learner Safety and Contributor Safety stages. Likewise, p-values of less than or approximating .05 are indications that the differences in mean averages for Learner Safety and Contributor Safety are not due to chance and are a result of fundamental differences in performance as measured by the Likert mean averages in those stages.

Table 9

	Number of		Standard							
	Responses	Mean	Deviation		SS	df	MS	F	р	N
Crew 75	140	2.19	0.97	Between:	2.287	2	1.143	1.285	0.278	N=35
Crew 76	116	2.05	0.97	Within:	292.846	329	0.89			N=29
Crew	70	0.00	0.05	-	005 400	004				NI 40
131	76	2.26	0.85	I otal:	295.133	331				N=19
		ornor Sofe	417							
-	Number of Standard									
	Responses	Mean	Deviation		22	df	MS	F	n	N
Crow 75	140	1 07	0.63	Between:	1 8/1	2	0.02	2 563	0.070	N-35
Crew 75	116	1.97	0.64	 Within:	118 116	320	0.32	2.303	0.073	N=33
Crew	110	1.01	0.04	 vvitriiri.	110.110	523	0.000			11-23
131	76	1.96	0.46	Total:	119.957	331				N=19
	Con	ntributor Sa	afety							
	Number of		Standard							
	Responses	Mean	Deviation		SS	df	MS	F	р	N
Crew 75	140	2.40	0.86	Between:	9.904	2	4.952	8.809	0.000	N=35
Crew 76	116	2.02	0.66	Within:	184.946	329	0.562			N=29
Crew	70	0.40	0.05	Tatalı	104.05	224				N 10
131	76	2.13	0.65	Total:	194.85	331				N=19
	Challenger Safety									
	Number of Standard									
	Response	Mean	Deviation		SS	df	MS	F	n	N
Crew 75	240	2.55	1.04	Between:	1 392	2	0.696	0.629	0.534	N=35
Crew 76	145	2.68	1 10	 Within:	528 339	477	1 108	0.020	0.001	N=29
Crew		2.00			020.000					
131	95	2.58	1.01	Total:	529.732	479				N=19
	-									
	0	verall Safe	ty							
	Number of		Standard					_		
	Responses	Mean	Deviation		SS	df	MS	F	р	N
Crew 75	595	2.25	0.93	Between:	7.58	2	3.79	4.589	0.01	N=35
Crew 76	493	2.10	0.94	Within:	1,162.93	1,408	0.826			N=29
131	323	2.26	0.82	Total:	1,170.51	1,410				N=19
	Harvest Data									
	Number of		Standard						-	
	Responses	Mean	Deviation		SS	df	MS	F	р	N
Crew 75	10	2.26	0.19	Between:	0.30	2	0.148	2.547	0.103	N=10
Crew 76	10	2.11	0.27	Within:	1.161	20	0.058			N=10
Crew 131	3	2.45	0.30	Total:	1.457	22				N=3

ANOVA Results

Chapter 5: Conclusion

In summary, it can be concluded that there was no direct relationship between the level of psychological safety felt within the crews, as demonstrated by the average scores for the four stages, and the level of productivity exhibited by each crew. Crew 131 had the highest productivity for the three days they harvested red bell peppers before being switched to green bell peppers. Crew 75 had the second-highest productivity score, while Crew 76 had the lowest productivity score. Crew 76 had the lowest average of psychological safety for all four stages. Crew 76 had the lowest productivity measured by pounds packed per person per hour while exhibiting the highest level of psychological safety. Crew 76 consistently employed the greatest number of employees over the ten days of harvest data being gathered, with an average of over 52 employees in the crew per day. Crew 131 had an average of 42.33 employees per day for those days harvesting red bell peppers, and Crew 75 used an average of 49.1 employees for the same 10-day period.

All three interviewed crews exhibited the existence of Inclusion, Learner, and Contributor Safety as shown by their responses and team mean averages. However, there were statistical differences between the three crews in their responses to Learner and Contributor Safety, as exhibited in Table 9.

The average mean score for Challenger Safety ranged from 2.55 to 2.68, considerably higher than the mean scores for Inclusion, Learner, and Contributor Safety. While scores were lower in Inclusion and Learner Safety, indicating agreement by the team in those stages, Contributor and Challenger Safety scores were higher in all crews, indicating a lesser degree of agreement for those specific stages. Several factors may help explain those differences. Those factors include Hofstede's (2023) characterization of Mexican culture by defining their need for collectivism, uncertainty avoidance, and awareness of power distance. The workers' desire to feel included and their ability to ask questions and learn were generally present on all three crews, as evidenced by their lower scores in the Inclusion Safety and Learner Safety stages. This is supported by Hofstede's (2023) Cultural theory that Mexican culture is predisposed to putting the collective group's needs above one's own needs to belong, as well as the high level of uncertainty avoidance leading to asking questions to understand what tasks and results are expected. Likewise, higher scores in Contributor Safety and Challenger Safety can be partially explained by the Mexican culture's need to respect and give credence to the high level of power distance considered normal.

It is interesting to note that Crew 75 had the highest mean average for Contributor Safety and the highest mean average age among the three crews. Both Crew 76 and Crew 131 had similar averages regarding whether their foreperson was open to listening to suggestions, asking questions about suggestions, and whether the individual worker was willing to offer guidance in the future. Crew 76's average for those three questions was 2.0, indicating agreement, while Crew 131's mean average was 2.08 for those same three questions. Crew 76 and Crew 131 average age of interviewees was 45.7 and 43.6 years, respectively, considerably younger than the average age of Crew 75.

Regarding Challenger Safety, all three crews did not believe there were occurrences of confrontations with the foreperson. Each crew also had an average of over 2.24 when answering whether healthy disagreements can be productive. In addition, when the interviewees were asked if they could disagree if necessary or could disagree in the future, all average scores were between 2.50 and 2.61, indicating discomfort or an inability to disagree with the foreperson.

There was also some inconsistency between the foreperson's and crew's answers regarding Challenger Safety, explicitly dealing with the statement that disagreements sometimes occur with the crew members. The foreperson of Crew 75 answered with a 4, indicating that disagreements do not happen. In contrast, the foreperson for Crew 76 responded with a 2, indicating agreement that conflicts do occur, and the foreperson for Crew 131 answered with a 1, indicating substantial agreement that disagreements do arise. The remaining three questions regarding Challenger Safety were responded to with 2 by each foreperson, indicating agreement that differences can be healthy and encouraging disputes now and in the future. Some differences might be explained by the definition each foreperson has with what they consider to be disagreements.

While Crew 75 had the lowest average mean score for saying disagreements with their foreperson do occur, the average was higher than neutral. This crew had the highest mean score for being able to work for this foreperson in the future. No matter how they responded to Challenger Safety, the interviewees of all three crews agreed that they would be willing to work for their respective foreperson in the future.

Regarding the foreperson's answers to Inclusion and Learner Safety within the organization, all three answered with an average mean of 1 to all questions, indicating substantial agreement. Regarding Contributor and Challenger Safety, the forepersons in Crew 75 and 131 responded with a mean average of 1 to all questions. In contrast, the foreperson in Crew 76 had a mean average of 1.75 for Contributor Safety and 1.5 for Challenger Safety within the organization. While still indicating agreement with those stages within the organization, it raises some questions, such as why one interviewed foreperson felt that way.

Summary

 Did the crew with the highest degree of psychological safety pack the most pounds per person per hour?

The crew that exhibited the highest degree of psychological safety did not pack the most pounds per person per hour.

2) Can Hispanic agricultural field workers be brought together temporarily for the sole purpose of doing a repetitive job to exhibit the philosophy of psychological safety?

Results indicated that all three crews exhibited levels of psychological safety in the Inclusion, Learner, and Contributor stages while exhibiting much lower levels of psychological safety in the Challenger stage.

3) Can Contributor Safety be present or accepted in an agricultural harvest labor crew with a top-down management structure?

While Contributor Safety existed within the three crews, it was similar to the Likert averages for Inclusions Safety but was not as strongly felt as the existence of Learner Safety.

Future Research

Several exciting phenomena surfaced during this research project that could lead to future research. These include:

 How does the time the employee has worked with the foreperson affect their feeling of psychological safety? Does the amount of time spent continuously working for a foreperson change the employee's level of psychological safety?

- 2) Comparing the psychological safety of the harvest employees with the psychological safety of the packer employees. Do the two groups share similar feelings of psychological safety, or are they different? And why?
- 3) How does the hiring/firing power of the foreperson affect the stages of psychological safety within an agricultural labor crew?
- 4) Does the level of psychological safety exhibited and demonstrated by ownership, management, supervisors, and office staff influence the level of psychological safety felt within the crews in the field? Is the level felt in the field more dependent on the training and skill set of the foreperson? Would focusing foreperson training on teaching and implementing Psychological Safety influence the type of individuals drawn to a particular organization or foreperson?
- 5) Would training forepersons in the benefits and implementation of psychological safety increase levels of psychological safety within their crews?

These are all questions that could be addressed in follow-up research. The lack of current research into increasing psychological safety in agricultural labor teams indicates it is not considered a potential methodology to improve productivity, creativity, and job satisfaction. Further study would provide incremental information about maximizing creativity, efficiency, and productivity to lower labor costs.

Limitations

- Crews from only one FLC participated in the interview process. Participation by additional FLC crews would have provided a broader perspective and more diverse data.
- Length of time harvest data was collected. Harvest data was collected for 10 days. Increasing the days would have provided additional information and analysis.

3) No calculations were made to compare the average daily hourly wages for each crew member by incorporating their box bonuses and comparing those results to the level of psychological safety felt within each crew.

Recommendations to OD Practitioners

Be mindful of organizational culture, as described by Schein (1999), and social culture, as defined by Hofstede (2023), while researching psychological safety, especially in those environments not previously studied. Utilize a short psychological safety assessment tool with a Likert scale, as suggested by Edmondson (1999), to measure the level of psychological safety within any team or organization you are consulting with. Finally, interview as many levels of ownership and management as possible to determine the organization's awareness and attitude toward psychological safety and to assist in determining its organizational culture.

Final Conclusions

Farm labor harvest crews are generally not considered teams but rather crews. The research presented in this thesis now adds another segment of the working population that will contribute to the ongoing study of psychological safety. Adding this segment of the workplace population provides the opportunity to research how implementing psychological safety may improve job performance, job creativity, and job satisfaction for an underrepresented workforce.

References

- Clark, T. R. (2020). *The 4 stages of psychological safety: Defining the path to inclusion and innovation*. Berrett-Koehler Publishers.
- Edmondson, A. C. (2002). *Managing the risk of learning: Psychological safety in work teams* (pp. 255-275). Division of Research, Harvard Business School.
- Edmondson, A. C. (2019) *The Fearless Organization. Creating Psychological Safety in the Workplace for Learning, Innovation, and Growth.* John Wiley & Sons, Inc.
- Hofstede, G. (1984). *Culture's consequences: International differences in work-related values* (Vol. 5). Sage.
- Hofstede, G. (2023, October 16). Country Comparison Tool?
- Martin, P. & Calvin, L. (2011). Labor trajectories in California Produce Industry. *ARE Update*, 14(4), 1-4.
- Martin, P., Hooker, B., Akhtar, M., & Stockton, M. (2016). How many workers are employed in California agriculture? *California Agriculture*, 71(1), 30-34.

Rural Migration News (April 2021). 27(2).

Thompson, V. A. (1965). Bureaucracy and innovation. Administrative Science Quarterly, 1-20.

Appendix A: Research Instruments

Psychological Safety Foreperson Questionnaire

Date:		Years as a foreperson:		Crew Number:		
Male		Years as a foreperson with this company:		Female		
Age:	20-25	26-31	32-37	38-44	44-50	50+

Strongly

Agree

Column1

Agree

Column2

Section A: Inclusion Safety (crew) How much do you agree or disagree with the following statements:

- 1) I like being the foreperson of this crew
- 2) The crew members listen to me
- 3) I feel respected as the crew foreperson

Any additional comments about Inclusion Safety

Section B: Learner Safety (crew)

- 1) I give harvest directions to the crew every day
- 2) I regularly ask the crew if they have any questions.
- 3) I welcome and appreciate questions
- 4) I answer all questions

Any additional comments about Learner Safety

Section C: Contributor Safety (crew)

- 1 I am open to suggestions on how to improve the process
- 2) I ask questions about the suggestion
- 3) We discuss how best to implement the suggestion
- 4) I try to encourage new suggestions from the crew

Any additional comments about Contributor Safety

Section D: Challenger Safety (crew)

- 1) Disagreements sometimes occur with crew members
- 2) I believe it is healthy for employees to disagree
- 3) I welcome or encourage disagreement
- 4) I will continue to welcome disagreement in the future

Any additional comments about Challenger Safety

Section A: Inclusion safety (organization)

How much do you agree or disagree with the following statements

1) I like being a foreperson in this organization 2) My supervisors listen to me

3) I feel respected by the organization

Any additional comments about Inclusion Safety within the organization

Section B: Learner Safety (organization)

1) I receive harvest instructions every day from my supervisor

2) If I have questions I ask them 3) My questions are welcomed and appreciated.

4) My questions are answered

Any additional comments about Learner Safety within the organization

Section C: Contributor Safety (organization)

1) My supervisors are open to receiving my suggestions

- 2) My supervisor has discussed my suggestion with me 3) My suggestions are welcomed and appreicated.
- 4) I will continue to offer suggestions in the future

Any additional comments about Contributor Safety within the organization

Section D: Challenger Safety (organization)

- 1) My supervisors ask for my opinion.
- 2) I am able to verbalize my opinion if it does not agree with
- 3) My supervisor is willing to converse about our different of
- 4) Based on my experience, I will continue to offer my opinio

Strongly

Disagree

Column

Disagree

Colun

Column1	Column2	Column3	Column4	Column5	
my superv	/isor's				
pinions					
n					



Neutral

Disagree

Column3 Column4

Strongly

Disagree

Column5

Strongly				Strongly
Agree	Agree	Neutral	Disagree	Disagree
Column1	Column2	Column3	Column4	Column5

Column1	Column2	Column3	Column4	Column5

Neutral

Colu

Strognly

Agree

Colu

Agree

Psychological Safety Crew Questionnaire

Date:	Position:	Crew Number:
	Harvester	
Male	Packer	Female
	Quality Control	
Age	Stacker	
	Other	

Column1

Column2

Section A: Inclusion Safety How much do you agree or disagree with the following statements:

1) I like being a member of this crew

- 2) I knew the foreperson before I began working here
- 3) I feel respected as a member of this crew
- 4) Other crew members listen to me

Comments that came up Inclusion Safety

Section B: Learner Safety

- 1) Harvest instructions are given daily
- 2) Questions are welcomed and appreciated
- 3) Questions are answered
- 4) I ask questions when I do not understand

Comments that came up about Learner Safety

Section C: Contributor Safety

- 1) I am able to offer suggestions on how to improve the proc
- 2) My foreperson is open to listening to my suggestions
- 3) My foreperson asks questions about my suggestion

4) I am willing to offer other ideas in the future

Comments that came up Contributor Safety

Section D: Challenger Safety

- 1) Disagreements sometimes occur with the foreperson
- 2) Healthy disagreement can be productive
- 3) I am capable of disagreeing if necessary
- 4) I would disagree in the future if needed
- 5) I would work with this foreperson in the future

Comments that came up about Challenger Safety

Any additional observations overall

						_
	Column1	Column2	Column3	Column4	Column5	
e	ss					

Column1	Column2	Column3	Column4	Column5

Strongly				Strongly
Agree	Agree	Neutral	Disagree	Disagree
Column1	Column2	Column3	Column4	Column5

Column4

Column5

Column3

34