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Measuring Employee Engagement: Are Engaged Employees Less Likely to Sustain a Workplace Injury?

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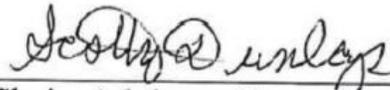
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MEASURING EMPLOYEE ENGAGEMENT: ARE ENGAGED EMPLOYEES LESS
LIKELY TO SUSTAIN A WORKPLACE INJURY?

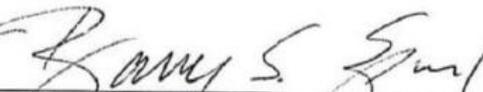
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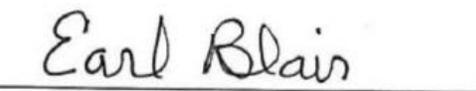
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SUSTAIN A WORKPLACE INJURY?

BY

REBECCA MULLINS

Submitted to the Faculty of the Graduate School of
Eastern Kentucky University
in partial fulfillment of the requirements for the degree of

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ABSTRACT

This thesis focuses on employee engagement in a manufacturing facility and strives to determine whether less-engaged employees are more likely to sustain an injury while on the job. Specifically, this study analyzes employee engagement with other employees, employee engagement with management, employee engagement with policies and procedures as well as employee's self-initiative. A Likert-scale survey was administered and was both voluntarily and anonymously completed by 171 hourly employees. The data was then analyzed and it was concluded that certain engagement criteria, do in fact, relate to an employee's on-the-job injury status.

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CHAPTER 1

INTRODUCTION

In relation to safety, a workforce is made up of three very different types of employees: the non-compliant, the compliant and the committed (Sims, 2014).

Non-Compliant: This employee will bypass any and all safety policies and procedures in order to maintain high production or personal comfort. These employees, for example, may not fully complete lock-out/tag-out on a machine when performing service in order to save a few seconds or may refuse to wear their personal protection equipment properly just because it is slightly uncomfortable.

Compliant: This employee will follow safety policies and procedures and perform duties as expected. These employees will wear personal protection equipment, will review a Job Risk Analysis before performing tasks and will adhere to direction from a supervisor.

Committed: A committed employee will not only comply with policies and procedures put in place, but always has the success of the organization in mind. These employees do the right thing, even when no one is looking. For example, a machine operator may notice that another employee has left the break room without wearing safety glasses and will provide a quick reminder to retrieve them before proceeding to the production floor. Committed employees are those who speak up in meetings, express new ideas, and always have the success of the company in mind.

As an employer, it is extremely vital to ensure that the workforce is made up of committed, well-engaged employees. Employees who are committed to the values of the organization and who take pride in their work contribute to the ultimate success of

the organization. Identifying engaged employees goes far beyond simply seeing which employees show up to their shifts on time. Engaged employees are invested in reaching not only personal goals, but work on behalf of goals and values established by the organization. When working to maintain an organization's safety culture, improve an existing safety culture, or even create a safety culture in a workforce that seems to lack one, promoting employee engagement is a critical component to consider.

STATEMENT OF THE PROBLEM

This research focused on identifying a site's employee engagement and determining whether or not there is a relationship between employee engagement and injuries sustained. Data collected will determine employee engagement within four different criteria:

- Employee engagement with other employees
- Employee engagement with management
- Employee engagement with policies and procedures
- Employee self-initiative

This research quantified how well employees are engaged at the facility and whether or not engaged employees are less likely to experience a workplace injury and what, if any, factors contribute to those injuries.

PURPOSE OF RESEARCH

The purpose of this research is to identify how engaged a facility's employees are in relation to workplace safety. This research identified their level of engagement with other employees, engagement with management, engagement with policies and

procedures and identified employee initiative. This research sought to identify relationships between certain demographics and engagement criteria. This research also sought to show relationships between whether or not an employee has sustained an injury at work and certain engagement criteria. By quantifying engagement levels at this site, management at this site can take the findings and utilize them to make changes to safety programs in order to enhance employee engagement and improve the safety culture if necessary.

METHODOLOGY AND DATA COLLECTION

The research methodology used for this study included administering a survey at a manufacturing facility. During one of the weekly “Take a Minute” meetings within each department, supervisors distributed and collected the surveys. Participants both voluntarily and anonymously completed the survey. Employees on both first shift and second shift were surveyed. The survey collected data about the following demographics: age, gender, education, length of employment at the facility, pay grade, and injury status. The survey also included twenty Likert-scale questions with answer choices including: never, seldom, sometimes, mostly, and always. Each question fell into a category of engagement: Employee Engagement with Other Employees, Employee Engagement with Management, Employee Engagement with Policies and Procedures, and Employee Self Initiative. The Likert-scale survey questions, separated by engagement category, were as follows:

Employee Engagement with Other Employees:

- Would you confront an employee about an unsafe act or behavior?
- Do you participate in discussion during a safety meeting/training?
- Do you participate in pre-shift stretching?
- Do you communicate with other employees off work hours?

Employee Engagement with Management:

- Would you report an unsafe act or behavior?
- Would you want to meet with management to solve safety issues?
- Do you suggest ideas to improve safety to management?

Employee Engagement with Policies and Procedures:

- How often do you get frustrated when another employee doesn't follow safety policies/procedures?
- How often do you follow safety policies and procedures?
- I follow safety policies/procedures; I never take "shortcuts".
- Do you support new policies and procedures?
- Do you fully complete LOTO2 when performing it?
- Do you feel safety policies/procedures get in the way of performing your job?

Employee Self Initiative:

- Are you likely to be involved in the solution to a safety concern?
- Would you fix an unsafe situation yourself if you could?
- Do you review the JRA for your job prior to your shift?
- Do you stretch during your shift?

- Do you like being rewarded/acknowledged for safe behavior or a safety improvement?
- Do you think of safety while at home with your family?
- I wear my PPE in good condition.

Surveys were administered to both first and second shift hourly employees only. Salary employees were not surveyed. 171 anonymous surveys were collected.

ASSUMPTIONS

The only assumption that can be made from this research is that all respondents completed their survey truthfully. Anonymity was integrated into the research design to generate truthful responses. This survey was completed voluntarily and there were no incentives for completing the survey.

LIMITATIONS

Although 171 surveys were completed and collected, there are approximately 220 hourly employees employed at the site surveyed. The remaining 49 employees not surveyed may have been absent from work for a number of reasons including, but not limited to sickness, FMLA, temporary disability, or workplace injury.

IMPLICATIONS OF RESEARCH

The data collected from this research and the correlations made between demographics and employee engagement with other employees, employee engagement with management, employee engagement with policies and procedures, and employee self-initiative can help the site surveyed, as well as other organizations

identify areas for improvement in relation to enhancing employee engagement initiatives as well as improving their safety culture.

By analyzing engagement criteria and correlating it to injuries sustained while working in the facility, this research may identify areas in which training needs to be increased, policies and procedures need to be altered, or corrective measures need to be enforced. This research will be able to identify whether or not engaged employees are less likely to sustain an injury while at work and if less-engaged employees are more likely to sustain an injury and what factors contribute to the injury status of both injured and non-injured employees.

The questions measuring employee engagement with other employees are designed to identify whether or not employees feel a sense of community and belonging at work with their colleagues rather than a feeling of isolation. The data collected will identify whether or not employees care about the well-being of their colleagues and keep their safety and well-being in mind.

The goal of the questions measuring employee engagement with management is to identify whether or not employees felt as if management had the employee's best interest in mind when in relation to workplace safety. These questions detected whether or not employees felt as if they had a voice at work and that their opinions are valued by those salaried employees.

The questions regarding engagement with policies and procedures identify both strengths and weaknesses within the safety program and identify areas for improvement. Employees anonymously and honestly admitted to compliance or lack

thereof when it came to certain policies and procedures. The data collected from these questions could identify errors within certain areas of the safety program and possibly identify the need for more corrective actions.

Measuring an employee's self-initiative truly identifies which employees are committed to the company. These questions identify whether or not company values are instilled in the employees, and cause them to bring their best self to work each day, with the ultimate goals of the company in mind.

CHAPTER 2

LITERATURE REVIEW

Ludwig and Frazier, (2012) described how employee engagement is not a well-defined construct, as many define it very differently. They explain that according to the Gallup Employee Engagement Survey Analysis Tool (ESAT; Corporate Leadership Council, 2009) engagement can be broken into rational and emotional engagement. Rational engagement has been defined as “the extent to which employees believe that managers, teams, or organizations have their self interest in mind”, while emotional engagement is defined as “the extent to which employees value, enjoy, and believe in their jobs, managers, teams, or organizations” (Ludwig and Frazier, 2012, p. 76).

Woods and Sofat (2013) explained how the concept of engagement is typically attributed to Kahn (1990), whose ethnographic research led to the definition of engagement as “the harnessing of organization members’ selves to their work roles”. Kahn proposed that engaged individuals were physically involved, cognitively vigilant, and emotionally connected with their work (Woods and Sofat, 2013, p. 2203). Woods and Sofat created a study in which they examined the associations of personality traits of the Big Five model with work engagement. They found that the personality facets assertiveness and industriousness were the strongest predictors of work engagement, and that both exhibited direct and indirect effects, mediated by psychological meaningfulness.

It has been described how management behavior moderates the relationship between engagement and organizational outcomes and therefore can influence

employee behavior (Ludwig and Frazier, 2012, p 76). Blessing White, Inc. (2008) identify that managers must be engaged for their subordinates to be engaged. "Survey data suggested that management must be customer focused, communicate effectively, and have the employees' well-being as a high priority to produce engaged employees because they have built trust" (Ludwig and Frazier, 2012, p 76).

Development Dimensions International (DDI, 2005) presented that a manager must exhibit five behaviors in order to create and maintain a highly engaged workforce. These behaviors include aligning efforts with strategy, empowering employees, promoting and encouraging teamwork and collaboration, helping people grow and develop, and providing support and recognition where appropriate. (Sridevi and Markos, 2010, p 91).

Much research has been conducted in order to determine the driving factors that will increase employee engagement. Sandhya Sridevi, and Solomon Markos, authors of "Employee Engagement: The Key to Improving Performance", explain that employees want to find meaning in their work. According the Penna research report (2007) meaning at work has the potential to be a valuable way of bringing employers and employees together to the benefit of both where employees experience a sense of community, the space to be themselves, and the opportunity to make a contribution (Sridevi and Markos, 2010, p 91). Penna researchers have also come up with a model of engagement called "Hierarchy of Engagement", which compliments Maslow's Hierarchy of Needs. This model tiers basic employment components that will keep employees thriving at work. The bottom tier is composed of pay and benefits. After this need is

met, an employee will look for development opportunities and the possibility for promotion, which makes up the middle tier. According to the Blessing White (2006) study, almost two thirds of surveyed employees wanted more opportunities to grow in order to remain satisfied with their jobs. The bottom two tiers of the “Hierarchy of Engagement” are primarily composed of monetary principles and the prospect to obtain authority, however, the top tier involves the employee looking to an alignment of value-meaning, which is displayed by a true sense of connection, a common purpose and a shared sense of meaning at work (Sridevi and Markos, 2010, p 91).

When discussing improving participation in safety, it has been noted that the first step in increasing employee involvement lies at the forefront of the hiring process. “Organizations with elite employees normally offer competitive salaries and often use an array of selection tools, such as personality tests, biodata instruments, assessment center exercises, vocation tests, structured interviews, and cognitive ability tests” (Williams, 2008, p 40). Active employee engagement is crucial for optimizing a safety culture. Employees must provide each other with corrective feedback when risky behavior is identified, especially since the shortcuts are often perceived as faster and easier, and because supervisors are not always present (Williams, 2008, p 40).

The American Society of Safety Engineers described a study that examined the use of safety management practices among 254 U.S. contractors. “Building a Safety Culture: Improving Safety and Health Management in the Construction Industry”, was issued by Dodge Data and Analytics based on a study produced in partnership with CPWR, United rentals and 12 other supporting organizations (ASSE, 2016). When

speaking of investments, contractors reported more benefits from their investments in safety management practices with a growing recognition of the need to actively engage workers to improve project safety. According to the report, worker involvement is the most widely recognized aspect of a world-class safety program, selected by 85% of the contractors surveyed in 2016, which was a 19% increase since 2012. James Dorris, EHS Vice President at United Rentals explained, “When workers are made a part of the process and are provided the tools and training they need to succeed, safety becomes recognized as the one thing that sets them, and the company they work for, apart from the others” (ASSE, 2016, p 14).

Workers perceptions of safety climate, often explained as both the perceptions and expectations that employees have regarding their safety in their organization, have been regarded as a principal guide to safety performance (Gyekye, 2005, p 291). Gyekye explains, “Researchers have noted that workers with a negative perception of safety climate tend to engage in unsafe acts, which increase their susceptibility to accidents, and workers who perceive job insecurity, anxiety and stress have exhibited a drop in safety motivation and compliance whereas workers with a positive perception of their workplace safety have registered fewer accidents” (Gyekye, 2005, p 292). The extent to which workers view their organizations as being supportive, concerned and caring about their general well-being and satisfaction is likely to affect the workers perception of the organizational safety climate and influence safe work behaviors and the frequency of accidents (Gyekye, 2005, p 292).

Gyekye (2005) conducted a study among industrial workers that examined their safety perceptions. This study compared the degree of workers' job satisfaction with their perception of safety on Hayes et al.'s Work Safety Scale. Gyekye measured perceptions of safety climate with the 50-item Work Safety Scale, which assessed the following five categories with each category having ten subsets: job safety, coworker safety, supervisor safety, management commitment to safety, and satisfaction with the safety program. Gyekye found that dissatisfied workers have a pessimistic and unconstructive view of the safety climate in their workplace whereas those who expressed job satisfaction had a positive and constructive perception. The study revealed that satisfied workers were more compliant with safety management policies and subsequently registered lower rates of accident involvement than their dissatisfied colleagues. Satisfied employees had positive perceptions of management with a consensus that supervisors encourage and praise safe work behaviors, keep workers informed of safety rules, and act on safety suggestions whereas dissatisfied workers felt as if training was inadequate, safety suggestions were not acted upon, and safe behaviors were not rewarded.

CHAPTER 3

RESEARCH

The intent of this research was to examine the level of engagement of employees at a manufacturing facility and to find any correlations between employee engagement and injuries sustained. This research will be helpful to the facility in which it was conducted as it may identify areas in which the current safety program can be improved. This research may also prove beneficial to other facilities to identify how well their employees are engaged and how an employee's engagement relates to safety performance. Employees anonymously and voluntarily completed a survey, which yielded 171 respondents. When determining age, the following demographic information was collected (see table 1):

Table 1: Respondent's Age

Age	Respondents	100.00%
18-30	36	21.05%
31-40	42	24.56%
41-50	32	18.71%
51-60	39	22.81%
61-70	3	1.75%
71-80	1	0.58%
No Response	18	10.53%

When determining gender, the following demographic information was collected (see table 2):

Table 2: Respondent's Gender

Gender	Respondents	100.00%
Male	159	92.98%
Female	8	4.68%
No Response	4	2.34%

When determining education, the following demographic information was collected (see table 3):

Table 3: Respondent's Education

Education	Respondents	100.00%
Some High School	5	2.92%
High School Graduate/GED	76	44.44%
Some College	54	31.58%
Associate's Degree	16	9.36%
Bachelor's Degree	9	5.26%
Master's Degree	2	1.17%
No Response	9	5.26%

When determining length of employment at the facility, the following demographic information was collected (see table 4):

Table 4: Respondent's Length of Employment

Employment (Years)	Respondents	100.00%
0-1	11	6.43%
1.1-5	51	29.82%
5.1-10	45	26.32%
10.1-15	23	13.45%
15.1-20	8	4.68%
20.1-25	5	2.92%
25.1-30	12	7.02%

Table 4 (continued)

Employment (Years)	Respondents	100.00%
30.1-35	0	0%
35.1-40	2	1.17%
40.1-45	0	0 %
45.1-50	1	0.58%
No Response	13	7.60%

When determining an employee’s pay grade- an hourly wage assigned to certain jobs per the union contract with “1” being the lowest and “3” being the highest, the following demographic information was collected (see table 5):

Table 5: Respondent’s Pay Grade

Pay Grade	Respondents	100.00%
1	71	41.52%
2	39	22.81%
3	53	30.99%
No Response	8	4.68%

When determining if an employee had been injured at the facility, the following information was collected (see table 6):

Table 6: Respondent’s Injury Status

Injury Sustained	Respondents	100.00%
Yes	102	59.65%
No	61	35.67%
No Response	8	4.68%

CHAPTER 4

RESULTS:

The research conducted has identified significant relationships between an employee's injury status and an employee's engagement with other employees, engagement with management, engagement with policies and procedures and the employee's self-initiative.

Injured Employees

102 of 171 (59.6%) respondents reported that they had been injured at some point during their employment at the facility. Notably, 34 of the 102 (33.3%) employees who reported they had been injured during their employment at the facility have only been employed by the company for 5 years or less, which is 54.8% of all those employees who have worked for the company for five years or less.

71 of the 102 workers (69.6%) who reported that they had been injured during their employment at the facility reported that they "sometimes", "seldom" or "never" reviewed their Job Risk Analysis, a document that lists job tasks in sequence, identifies all possible risks associated with each task and identifies proper precautions to take and personal protective equipment to wear while completing the tasks. 35 of the 102 (34.3%) employees who reported sustaining an injury during their employment at the facility reported that they do not "always" fully complete Lock Out/Tag Out, which are policies and procedures designed to ensure that employees are safeguarded, all energy sources are isolated and that a machine cannot start up again prior to the completion of maintenance and removal of the locks. Failure to review Job Risk Analyses

and failure to conduct a full completion of Lock Out/Tag Out procedures identifies a weakness in an employee's engagement with policies and procedures as well as their self-initiative.

Out of the 102 respondents that reported that they had been injured at some point during their employment at the facility, only 40 (39.2%) of these respondents reported that they would "mostly" or "always" like to meet with management to solve safety concerns. 82 of the 102 (80.4%) respondents that reported that they had been injured during their employment at the facility reported that they are not always in full support of new policies and procedures. 75 of the 102 (73.5%) respondents who reported that they had been injured at some point during their employment at the facility felt that safety policies and procedures at some point got in the way of doing their job. These findings show that there may be room for managerial growth when it comes to the development and implementation of safety policies and procedures as well as a need for employee's to feel comfortable coming to management to address and help solve their safety concerns.

While analyzing the data, a relationship was made between a worker's reported pay grade and their report of sustaining an injury while employed at the facility. 48 of the 102 (47%) employees who reported that they had been injured during their employment at the facility also reported their pay grade as "1", the lowest. 26 of the 102 (25.4%) employees who reported that they had been injured during their employment at the facility also reported their pay grade as "2" and 28 of the 102 (27.4%) employees who reported that they had been injured during their employment

at the facility also reported their pay grade as “3”. Nearly one half of those employees who reported sustaining an injury during their employment at the facility report that their pay grade is “1” which may mean that these specific jobs have a higher risk index score as identified on the Job Risk Analysis or that these jobs may require more extensive training to reduce the risk for future injuries.

Non-Injured Employees

61 of the 171 (35.6%) respondents reported that they have not been injured during their employment at the facility. 33 of the 61 (54%) employees who reported that they have not been injured also reported that they have been employed by the company for 5 years or greater. Of the 61 respondents who reported they had not been injured during their employment at the facility, 58 (95%) reported that they “mostly” or “always” follow safety procedures. 54 of the 61 employees (88.5%) who reported that they have not been injured also reported that they would “sometimes”, “mostly” or “always” confront another employee about an unsafe act or behavior. 56 of the 61 (91.8%) employees who reported that they had not sustained an injury during their employment at the facility reported that they “mostly” or “always” wear their personal protective equipment in good condition. 48 of the 61 (78.6%) employees who reported that they have not been injured at the facility also reported their likeliness to report an unsafe act or behavior to management as “sometimes”, “mostly”, or “always”. 48 of the 61 (78.6%) employees who reported that they have not been injured during their employment at the facility also reported that they “sometimes”, “mostly” or “always” think of safety while at home with their families. 54 of the 61 (88.5%) employees who

reported that they had not been injured during their employment at the facility reported that they at least “sometimes”, “mostly” or “always” stretch during their shift. 56 of the 61 (91.8%) of the employees who reported that they had not been injured during their employment at the facility also reported that they “sometimes”, “mostly”, or “always” support new policies and procedures.

Employee Engagement with Other Employees

A total of 11 out of 171 respondents (6.4 %) reported “mostly” or “always” to all the questions measuring employee engagement with other employees. These questions identified whether or not an employee would confront another employee about an unsafe act, the likeliness of the employee to participate in discussion during safety meetings/training, whether or not the employee participated in group pre-shift stretching, and whether or not the employee communicates with other employees outside of work. 160 out of 171 respondents (93.6%) reported “sometimes”, “seldom” or “never” to these questions.

An alarming 99 of 171 respondents (57.9%) reported that they “sometimes” “seldom” or “never” participate in discussion during safety meetings and training, which means that ideas to improve safety efforts are going unheard, and could even mean that management is unaware of hazards such as a faulty guard on a piece of equipment, or a poorly written Job Risk Analysis, because that operator will not participate in discussion, which could ultimately lead to a near miss or the injury of another employee.

Only 57 (33.3%) of the 171 total respondents reported that they would “always” confront an employee about an unsafe act or behavior and only 47 out of 171 (27.4%)

respondents said that they would “always” report an unsafe act or behavior. Notably, this data presents that many unsafe acts and near miss situations do not get noticed by colleagues or supervisors. It is difficult for management to watch every employee at all times, so it is crucial for those hourly employees to hold each other accountable and care about each other’s safety.

Although the data shows a significant weakness in employee’s overall engagement with other employees, a notable correlation was made when analyzing the data. A total of 111 of 171 (64%) respondents reported that they “sometimes” “mostly” or “always” communicate with other employees outside of work. Out of these 111 respondents, 101 of them reported that they would “sometimes”, “mostly” or “always” confront another employee about an unsafe act or behavior. Confronting a colleague is a daunting task, but when employees form bonds and relationships with their colleagues, they become emotionally invested in their wellbeing-both at and away from work.

Employee Engagement with Management

The data collected identified that only 34 of 171 (19.8%) respondents reported “mostly” or “always” to all of the questions measuring employee engagement with management. These questions addressed whether or not an employee would want to meet with management to solve safety issues, whether or not they would suggest new ideas to improve safety and if they would report an unsafe act or behavior that they personally observed to management. 137 of 171 respondents (80.1%) reported

“sometimes”, “seldom” or “never” to these questions, showing that employees have negative perceptions of being engaged with their management team.

Only a total of 67 of 171 respondents (39.1%) reported that they “mostly” or “always” would want to meet with management to resolve safety issues. Of the 34 workers who have worked at the facility for 5 years or less and have reported being injured, 29 (85.3%) reported that they would like to like to be involved with management to solve safety issues. This data is important because it identifies a shift in a safety culture as more than half of all those employees who have been employed at the facility for five years or less have sustained an injury. However, it is promising to see, that given the opportunity, those injured employees would like to work with management to solve safety issues and prevent these injuries from happening again. Going forward, if no changes were made at this facility, the number of injuries sustained by newer employees could increase.

Employee Engagement with Policies and Procedures

The data collected shows significant non-compliance with safety policies and procedures at the facility, which is directly related to an employee’s injury status. 100 of the 171 respondents (58.4%) reported that they “sometimes”, “seldom”, or “never” get frustrated when another employee fails to follow safety policies and procedures. 75 of the 171 respondents (43.8%) admit that they “sometimes”, “seldom”, or “never” support new safety policies and procedures. 33 of the 171 respondents (19.2%) reported that they “sometimes”, “seldom”, or “never” follow safety policies and procedures with never taking “shortcuts”. 91 of the 171 respondents (53.2%) believe

that safety policies and procedures “sometimes”, “mostly”, or “always” get in the way of performing their job. Only 7 respondents admitted that they “sometimes”, “seldom”, or “never” follow safety policies and procedures, yet 6 of these 7 employees also reported that they have been injured at the facility.

A total of 28 out of 171 respondents (16.3%) reported “mostly” or “always” to all of the questions measuring employee engagement with policies and procedures. These questions identified whether or not an employee follows safety policies, gets frustrated when employees do not follow safety policies, identifies that the employee never takes “shortcuts”, supports new safety policies and procedures, fully completes Lock Out/ Tag Out, and that safety policies and procedures do not get in the way of completing their job. 143 respondents (83.6%) reported “sometimes”, “seldom” or “never” to these questions.

Employee Self-Initiative

A total of 13 of 171 respondents (7.60%) reported “mostly” or “always” to all questions measuring an employee’s self-initiative. These questions addressed whether or not an employee is likely to be involved in a solution to a safety concern, whether or not they would fix an unsafe situation if they could, if they review their Job Risk Analysis prior to their shift, whether or not they stretch during their shift, if they would like to be rewarded for their safety efforts and whether or not they think of safety while at home with their families. 158 respondents (92.4%) reported “sometimes”, “seldom”, or “never” to these questions.

An interesting association was made between gender and whether or not an employee thinks of safety while at home with family. 7 out of 8 (87.5%) respondents who identified as “female” reported that they “mostly” or “always” think of safety while at home with their family which is a notable contrast than those respondents who identified as “male” where only 104 of 159 (65.4%) reported that they “mostly” or “always” think of safety while at home with their family.

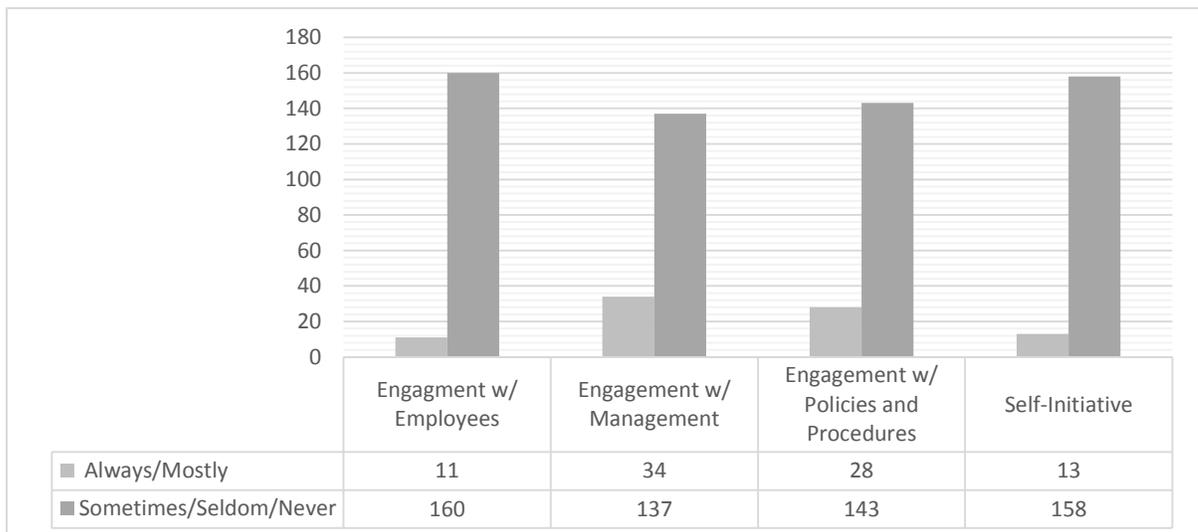
149 of the 171 (87.1%) respondents admitted that they at least “sometimes”, “mostly”, or “always” like being rewarded or acknowledged for their safe behavior or their efforts towards a safety improvement. With 80.1% of respondents showing negative perceptions of management and management involvement, implementing a structured Safety Rewards Program may prove to be beneficial to employees as they will feel their efforts are meaningful and acknowledgeable and may boost their self-initiative at work.

CHAPTER 5

DISCUSSION:

The results of this study identify a lack of employee engagement within all four engagement criteria which was surveyed. Well-engaged employees are those employees who answered “mostly” or “always” to all of the survey questions within the engagement category whereas unengaged employees responded “sometimes”, “seldom”, or “never” to all of the questions within the engagement category. When determining employee engagement with other employees only 6.43% of employees surveyed are considered well-engaged, while 93.57% are unengaged. When determining employee engagement with management, 19.89% of employees reported to be engaged, while 80.11% are unengaged. When identifying engagement with policies and procedures, 16.38% of employees identify as well engaged and 83.62% of employees are unengaged. When determining an employee’s self-initiative, 7.60% of employees are well-engaged with the remaining 92.40% considered unengaged (see figure 1).

Figure 1: Comparison of engaged and non-engaged employees.



The data collected identified strong relationships between employee engagement and workplace injuries. This study concluded that at the facility surveyed, unengaged employees are in fact more likely to sustain a workplace injury as opposed to their well-engaged colleagues.

Disengaging with policies and procedures introduces an opportunity for error, increasing an employee's risk of injury. When analyzing employee engagement with policies and procedures this study identified that 58 of 171 total respondents (33.9%) reported that they do not always fully complete Lock Out/Tag Out. Bypassing any part of these procedures can increase the risk associated with the unintentional start-up of a machine during maintenance. 35 (60.3%) of those employees who reported that they do not always fully complete Lock Out/Tag Out also reported sustaining a workplace injury, identifying a distinct relationship between employee engagement with policies and procedures and workplace injuries sustained. 73.5% of injured employees also reported that safety policies and procedures at some point got in the way of doing their job. If these employees chose to bypass these safety procedures, they may have put themselves at risk of injury.

Measuring employee initiative identifies which employees bring their best self to work each day. Employees with high initiative are investing in the goals and values of the company and prioritize workplace safety. Out of 102 employees who reported sustaining an injury 88 (86.2%) also reported that they don't always review their Job Risk Analysis before their shift. This lack of initiative leaves employees unaware of hazards associated with their job or the proper precautions to take to avoid injury. 71 employees

reported that they only “sometimes”, “seldom” or “never” stretch during their shift, with 43 (60.5%) of these employees also reporting that they have been injured. The lack of engagement with stretching may increase the risk of musculoskeletal disorders such as sprains and strains and sprains or cumulative trauma disorders such as tendonitis, tennis elbow and rotator cuff injuries.

Promoting employee engagement with other employees is a key component of a thriving workforce. Employees who feel a sense of community while at work will contribute in more ways than just production efforts. Employees who are comfortable with participating and who are encouraged to speak up during group meetings and training have valuable information to offer. Disengaged employees who do not participate in such activities not only miss out on valuable information, but eliminate the opportunity to speak up and make others aware of any safety concerns they may have which could potentially lead to a near miss or injury of another employee. In this study, 30 employees reported that they “seldom” or “never” participate during safety meetings or training, with 16 (53.3%) of these employees reporting that they had been injured during their employment at the facility.

It is also important to promote employee engagement with management. Employees who feel comfortable addressing safety concerns with their supervisors play a vital role in a facility’s safety performance. It is hard for supervisors to monitor every employee and every operation during their shift. Supervisors reap great benefit from employee feedback. This study concluded that 102 employees (59.6%) of employees only “sometimes”, “seldom” or “never” wanted to meet with management with solve

safety issues. Of these, 62 (60.7%) also reported sustaining a workplace injury. 93 total employees reported that they only “sometimes”, “seldom” or “never” suggest ideas to improve safety, with 53 (56.9%) of these reporting they have also been injured during their employment.

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APPENDIXES

APPENDIX A
EMPLOYEE ENGAGEMENT SURVEY

APPENDIX A: EMPLOYEE ENGAGEMENT SURVEY

What is your age?						
What is your gender?	Male			Female		
What is your highest listed level of education?	Some High School	High School Graduate / GED	Some College	Associate's Degree	Bachelor's Degree	Master's Degree
How long have you been employed by _____?						
How long have you worked in production? (Years)						
What is your pay grade?	1	2		3		
Have you ever been injured at work while working at _____?	Yes			No		
Would you confront an employee about an unsafe act or behavior?	Always	Mostly	Sometimes	Seldom	Never	
Would you report an unsafe act or behavior?	Always	Mostly	Sometimes	Seldom	Never	
How often do you get frustrated when another employee doesn't follow safety policies/procedures?	Always	Mostly	Sometimes	Seldom	Never	
How often do you follow safety policies and procedures?	Always	Mostly	Sometimes	Seldom	Never	
Are you likely to be involved in a solution to a safety concern?	Always	Mostly	Sometimes	Seldom	Never	
Do you participate in discussion during a safety meeting/training?	Always	Mostly	Sometimes	Seldom	Never	
Would you want to meet with management to solve safety issues?	Always	Mostly	Sometimes	Seldom	Never	
Would you fix an unsafe situation yourself if you could?	Always	Mostly	Sometimes	Seldom	Never	
I follow safety policies/procedures; I never take "shortcuts".	Always	Mostly	Sometimes	Seldom	Never	
Do you review the JRA for your job prior to your shift?	Always	Mostly	Sometimes	Seldom	Never	
Do you participate in pre-shift stretching?	Always	Mostly	Sometimes	Seldom	Never	
Do you stretch during your shift?	Always	Mostly	Sometimes	Seldom	Never	
Do you fully complete LOTO2 when performing it?	Always	Mostly	Sometimes	Seldom	Never	

Do you support new policies and procedures?	Always	Mostly	Sometimes	Seldom	Never
Do you like being rewarded/acknowledged for safe behavior or a safety improvement?	Always	Mostly	Sometimes	Seldom	Never
Do you suggest ideas to improve safety to management?	Always	Mostly	Sometimes	Seldom	Never
Do you communicate with other employees off work hours?	Always	Mostly	Sometimes	Seldom	Never
Do you feel safety policies/procedures get in the way of performing your job?	Always	Mostly	Sometimes	Seldom	Never
Do you think of safety while at home with your family?	Always	Mostly	Sometimes	Seldom	Never
I wear my PPE in good condition.	Always	Mostly	Sometimes	Seldom	Never