THE PEOPLE PERSPECTIVE OF EUTHANASIA

Steven Matthis
Division Chair of Agricultural and Industrial Programs
Sampson Community College

Introduction

The objective of this study was to determine the influence of selected employee attributes on their perceptions regarding methods of on-farm euthanasia in swine and on their concerns associated with the animal welfare aspects of these methods. Animal welfare and euthanasia are sensitive issues in the animal industry today. According to the National Pork Board’s new Swine Welfare Assurance Program booklet (2003), a pork producer's livelihood depends on the welfare and performance of the livestock. The National Pork Board (2003) states, “if an animal is mistreated or under stress, it will need to eat more feed to grow, will be more susceptible to disease and will generally not thrive” (p.3). McGlone and Pond (2003) state, “The pig industry must address issues of ethical values and consumer perceptions. Although animal scientists work in the world of science, they cannot ignore consumer thinking and behavior” (p.25).

The purpose and intent of this study was to determine if the euthanasia methods currently used are the preferred methods, or if there are other procedures that are better for the animal and for the employee performing the procedure. The variables researched include socio-demographic factors, socio-psychological factors, farm factors and euthanasia methods in order to determine the preferred on-farm euthanasia method. The study examines the personality types and demographics of swine farm employees, and how these relate to euthanasia and their willingness to euthanize pigs. Euthanasia methods are examined with regard to better meeting the animal welfare demands of swine employees and consumers.

Current Farm Euthanasia Situation

A lack of scientific research on specific farm animal euthanasia practices and failure of farms to accept a designated euthanasia method have led to a variety of methods being administered by farm employees. The American Association of Swine Veterinarians and the National Pork board published “On Farm Euthanasia of Swine- Options for the Producer.” This booklet lists the various acceptable methods that producers use to euthanize pigs. In the absence of a designated farm protocol, euthanasia could vary from farm to farm. The farm manager chooses the euthanasia method that he or she prefers, with no thought given to the process, safety, pig pain or employee distress.

Background Information
Euthanasia is defined as a humane death occurring without pain or distress (NPB 2003). The AVMA (2000) suggests the euthanasia process could be aesthetically displeasing. The term conjures up unpleasant images in the minds of many animal caretakers. Arluke (1991) suggests animal shelter workers feel a conflict between nurturing for animals and euthanizing animals. The fact remains that euthanasia is necessary in some form and at some time in most areas of animal husbandry.

Statement of the Problem

Animal welfare and euthanasia issues are increasingly becoming targets for the news media and animal welfare groups. A list of special interest animal welfare group sites is found on the internet, many of which create displeasing images in consumers’ minds. As reported by the Southwest Daily Times, a former Seaboard Farms employee faces animal welfare charges for improperly euthanizing a pig (Kletecka, 2001). Images and issues dealing with animal welfare issues are becoming more noticed by the consumer due to media coverage and special interest groups. Are these issues the result of a lack of company policy, employee training or employee attitude? These concerns range from the methods used to euthanize the pigs to the emotions of the farm employees completing this task. Companies are hiring specialists in the field of animal husbandry such as Dr. Temple Grandin to help solve problems from production to slaughter.

Specific research questions addressed by the euthanasia study include:

1. Which method of euthanasia, blunt trauma, electrocution, lethal injection, bolt gun, rifle or carbon dioxide gas, do employees prefer?
2. Does the employee perceive the pain of the pig an important factor when choosing a euthanasia method?
3. Do employees perceive safety as an important factor in performing euthanasia?
4. Which method of euthanasia, blunt trauma or carbon dioxide gas do employees perceive as being the fastest method of euthanasia for the pig?
5. What method of euthanasia training do employees prefer?
6. Do employees perceive the time it takes to complete the euthanasia process an important factor in choosing a method?
7. Do employees perceive the euthanasia as being a stressful part of the job?
8. Is there a correlation between an employee’s temperament and his or her attitude to euthanizing?
9. Do selected socio-demographic factors influence an employee’s attitude toward euthanasia?
10. Do selected socio-psychological factors have an effect on an employee’s attitude toward euthanasia?
11. Do selected farm factors influence an employee’s attitude toward euthanasia?
12. Do selected euthanasia methods influence an employee’s attitude toward euthanasia?
13. Does a combination of independent variables in the multivariate model influence an employee’s attitude?

Response to Selected Survey Questions In The Multivariate Model
Have you ever wanted to resign after euthanizing pigs?
4% of Baptists said “yes” compared to 11% of Catholics.
7% said “yes” when trained by another employee or the farm manager compared to 21%
when trained by the company trainer

Have you ever been too attached to an animal to euthanize it?
32% of males said “yes” compared to 41% of females
20% of whites said “yes” compared to 68% of Hispanics

If the employee designated to euthanize all the pigs on the farm got paid more money
or got more time off, would you want that job?
51% of males said “yes” compared to 33% of females
54% of those less than 30 years old said “yes” compared to 38% aged 40 or more.
53% of Baptists said “yes” compared to 34% of Catholics

If there were a method of euthanasia that was painless for the pig, would you use it
even if it took more time to do it?
86% of females said “yes” compared to 77% of males
73% of whites said “yes” compared to 91% of Hispanics

I would like more training on which pigs to euthanize and when to euthanize them.
45% of whites said “yes” compared to 87% of Hispanics.
86% of respondents with less than 8 year’s education said “yes” compared to 54% with 12
years.
69% who used blunt trauma
It is harder to euthanize a well pig
42% of females strongly agreed compared to 27% of males
36% of managers/service people strongly agreed compared to 29% of trainers

I wish I would never have to do it again
25% of females strongly agreed compared to 13% of males
55% who strongly agreed or agreed that “I wish I would never have to do it again” also had
strategies for coping with eu.
43% who strongly agreed or agreed that “I wish I would never have to do it again” used
blunt trauma in the farrowing house compared to 21% who strongly disagreed or disagreed.
70% who strongly agreed or agreed that “I wish I would never have to do it again” reported
they did not feel fine after euthanizing pigs.
49% who strongly agreed or agreed that “I wish I would never have to do it again” grew up
on a livestock farm compared to 29% who strongly disagreed or disagreed.
I get upset by euthanizing well pigs
63% of females strongly agreed or agreed compared to 34% of males
61% of Hispanics strongly agreed or agreed compared to 32% of Whites
48% who were trained by another employee strongly agreed or agreed compared to 61% of
who were trained by a company trainer or literature and 36% who were trained by a farm
manager.

**I get upset by euthanizing sick pigs**
23% of males strongly agreed compared to 12% of females
74% of Whites strongly agreed or agreed compared to 47% of Hispanics

**The hardest part is the physical process**
59% of males strongly agreed or agreed compared to 38% of females
56% of Hispanics strongly agreed or agreed compared to 33% of Whites
69% who strongly agreed or agreed used a bolt gun in the nursery compared to 56% who
used blunt trauma.

**After bolting I do not like to look at the hole**
35% of males strongly agreed or agreed compared to 23% of females

**Training on euthanize techniques would be helpful**
38% of Hispanics strongly agreed compared to 15% of Whites

**An employee can both euthanize and nurture pigs**
47% of Whites strongly agreed compared to 32% of Hispanics
47% of managers/service people strongly agreed compared to 34% of trainers
30% of people who work in breeding strongly agreed compared to 45% who work in
farrowing

**I could euthanize all the pigs every day**
54% of males strongly agreed or agreed compared to 38% of females

**It is more humane to euthanize the terminally sick**
55% of Whites strongly agreed compared to 35% of Hispanics

**Euthanizing affects my personal life**
43% with 11 or 12 years education or with an associate degree strongly agree compared to
24% with less than an 8-year education. in the nursery said “yes” compared to 50% who
used a bolt gun.

**Major Findings and Conclusions**

Conclusions 1: **Blunt Trauma is the preferred method of euthanasia by the survey
respondents.**

The first objective of this study is to determine which method of euthanasia, blunt
trauma or carbon dioxide gas, employees prefer. There is evidence to suggest (n=286, 74
percent) that the current method of blunt trauma used to euthanize 1-12 lb. pigs is the most reported method. There is also evidence to suggest (n=250, 65 percent) that carbon dioxide gas appears to the respondents to be less painful for the pig. Swine employees preferred not to hold the pig (n=175, 48 percent) while performing blunt trauma euthanasia. Another important finding that indirectly relates to an employee choosing the preferred method, is the willingness of the employee to choose a method that takes longer to perform if the new method causes less pain and stress for the pig (n=212, 55 percent). Choosing the preferred method is closely associated with the welfare of the pig, not the speed of the process.

An assumption about the preferred euthanasia method revolves around the employee’s understanding of the method that causes the least amount of pain for the animal. Even though blunt trauma (n=363, 93.6 percent) is the most predominantly used euthanasia method on surveyed farms, the respondents indicate they are willing to change the currently used method of farm euthanasia if the pig’s welfare is improved by the change.

Conclusion 2: The respondents perceive pig pain as an important factor in which method of euthanasia to choose.

The second objective involves the employees' perception of the amount of pain the pig endures during the euthanasia process as an important factor to consider when choosing a euthanasia method. There is an overlap between objective one and objective two, as suggested in conclusion one. The perceived level of pain experienced by the pig could influence the method of euthanasia chosen by the employee. The pain of the pig is definitely important to farm employees when determining which euthanasia method to use. Most employees (n=334, 86.6 percent) agree that it is more humane to euthanize an animal then let it die naturally in pain. Finding time to complete all the daily tasks on a farm is important, but a majority of the employees (n=212, 55 percent) agree that they are willing to use a method that took more time if the pig suffered less. The employees responded positively to the question about euthanizing a pig that is sick compared to euthanizing a pig that does not appear sick (n=275, 71.6 percent). Employees agree carbon dioxide gas euthanasia is less painful to the pig (n=250, 65.1 percent). Once an employee determines a pig is sick or in pain and will not recover, he or she does not get sad or upset (n=238, 61.8 percent) when euthanasia is performed. Many respondents (n=167, 43.2 percent) agree that euthanizing a pig that did not appear to be sick would cause them to feel sad or upset. Euthanizing a sick pig is less stressful for the employee.

Conclusion 3: Safety is perceived by the respondents as being an important factor in performing euthanasia.

Safety issues are extremely important in all euthanasia processes. As discussed earlier in the literature review, different methods of euthanasia are used for various sizes of pigs (NPB, 1997). Many of the workers completing the survey (n=289, 74.5 percent) have worked in the farrowing department. A total of 363 respondents (93.6 percent) currently use the blunt trauma method to euthanize 1-12 lb. pigs. When survey
respondents were asked about blunt trauma euthanasia being a safe method, they responded with an overwhelming positive response (n=300, 79 percent). A majority of the employees (n=212, 55 percent) agree that carbon dioxide gas euthanasia would be a safer method than blunt trauma.

The bolt gun euthanasia method is considered a safe method of euthanasia to use on nursery pigs (n=244, 64 percent). Many respondents (n=176, 45.4 percent) have worked in a pig nursery for one week or more. There appears to be a problem with bolt gun euthanasia in nursery-size pigs due to the small area on the nursery pig forehead to place the gun and the lack of an efficient method to restrain the animal while performing the process. These are safety concerns expressed by Dr. David Bishop (Personal communication, March, 2004).

Conclusion 4: Blunt trauma method of euthanasia is perceived by the employees to be the fastest method of euthanasia.

An ideal euthanasia process, by definition, is one that is quick and painless for the pig. The respondents agree (n=274, 71.2 percent) that the blunt trauma method of euthanasia is the quickest method. The speed of completing the euthanasia process relates to the stress level of the respondents. A number of employees (n=176, 44.4 percent) agree that they deal with the stress of euthanasia by completing the process quickly. The results reflect that the respondents perceive the increase in the speed of the euthanasia process as being less stressful for the employee and the pig.

Conclusion 5: Respondents prefer the on-farm method of euthanasia training.

All aspects of swine production require some degree of training. Some areas of production involve more sensitive issues and could induce employee stress. These areas may require specialized supervision and training, they include medication techniques, specialized birthing and euthanasia processes. The respondents agree (n=302, 79.3 percent) that more training in the euthanasia process would be helpful. A better understanding of the physiological aspects of euthanasia could improve job satisfaction as it relates to comfort level in dealing with pig euthanasia. The employees’ preferred training method is on-farm training (n=295, 76 percent). Hands-on training is considered to be the best training method. Most farm employees (n=208, 53.6 percent) currently receives euthanasia training from the farm manager. This suggests that farm managers should be updated periodically on current industry protocol and preferred methods of euthanasia.

Conclusion 6: The respondents agree time is an important factor to consider in choosing a euthanasia method.

To determine if the employees were interested in reducing the amount of pain and suffering of the pig, the employees were asked if they would take more time to complete a particular method of euthanasia if the pig suffered less pain. An overwhelming majority of the respondents (n=310, 80.1 percent) agreed that they would use a method that took
longer to complete if the pig had a less painful death. This indicates that employees are interested in the pain and discomfort of the pig. Even though time is at a premium on the farms, the welfare of the pig is more important to the employees. Female employees were more inclined to choose a less painful method of euthanasia (n=99, 86 percent) even though it would take more time. This compares to the male employees (n=205, 77 percent) responding to the same question. The employees with less than high school education (n=112, 88 percent) are more willing to use a method that takes longer to perform than the employees with greater than a high school education (n=64, 72 percent).

Conclusion 7: There is a degree of stress associated with euthanasia, but the level of stress affects employees differently.

Most occupations have stressful tasks that some employees dread performing. The seventh objective of this study is to determine if employees perceive pig euthanasia as being a stressful part of their job. Approximately one-third of the respondents (n=145, 36.5 percent) agree that euthanasia is not stressful. Responding to the same question, the respondents agree that performing the euthanasia process quickly (n=176, 44.4 percent) is their way of coping with stress. Stress in daily jobs can be reduced by familiarity with tasks. Euthanasia falls in this category, with 65.3 percent of the respondents agreeing that euthanasia becomes easier the more times they complete the process. Even though euthanasia is necessary, approximately one-half (n=178, 46.4 percent) responded that they wish they did not have to euthanize pigs. This could relate to some degree of employee stress.

Stress related to the physical process of holding a pig while performing euthanasia was surveyed. The respondents agree (n=175, 45.7 percent) that they do not like to hold the pig while euthanizing the animal. A less physical method that does not require the employee to hold the pig would help eliminate a degree of employee stress. The perception regarding a pig’s ability to recover and become viable are an important stress related factor for the employee. Only a few employees (n=94, 24.4 percent) get upset when they have to euthanize sick pigs, versus a larger percent (n=167, 43.2 percent) that become upset when they euthanize a pig that does not appear to be sick. A determination of sick versus not sick affects the degree of stress felt by the employee. The degree of pig sickness is an educational issue and will be discussed in the recommendations.

In order to better understand the euthanasia stress factor, employees were asked if they could euthanize a sick family pet. A majority of the employees (n=222, 57.3 percent) agree that they could euthanize a sick family pet. The stress related factor involves a definition and employee understanding of the term "sick." The degree of stress appears to be reduced if the animal is perceived to be terminally ill.

The stress associated with euthanasia does not appear to leave the farm and filter into the employee’s personal life. A large majority of employees (n=313, 81 percent) agree pig euthanasia does not affect their personal life.
The increased age of an employee does not appear to have an effect on employees' ability to euthanize pigs. A small percentage of employees (n=69, 18 percent) agree euthanasia gets harder with age. The fact that employee age is not a contributing factor in the acceptance of the euthanasia process could be related to the total years an employee has been euthanizing and the number of times the employee has euthanized pigs.

The Spanish-speaking farm employees are the least willing to euthanize pigs (n=59, 44 percent). The English speaking employees have a better tolerance (n=73, 29 percent) of the euthanasia process. Choosing a method of euthanasia more pleasing to the Spanish-speaking employees may increase their willingness to euthanize pigs. Choosing the correct euthanasia method will be addressed in the recommendation section of the project.

Conclusion 8: There is a relationship between an employee’s temperament and their attitude toward euthanizing and their willingness to euthanize pigs.

The largest number of respondents that completed the Keirsey Temperament Sorter (n=324, 84 percent) exhibited an SJ temperament. The most significant number of respondents yielded the following personality types: ESTJ (n=139, 36.2 percent); ISTJ (n=64, 16.6 percent); ESFJ (n=70, 18.2 percent); ISFJ (n=50, 13 percent). The percent of responding swine employees reporting the SJ temperament (84 percent) is significantly higher than the over-all population reported by Keirsey (40-45) percent and Myers-Briggs (38 percent).

Employees with an SJ temperament have a more negative attitude toward euthanasia (n=105, 32.4 percent) than the other three temperaments, SP, NT and NF. Most of the employees represented by the four temperaments have an ambivalent response toward their willingness to euthanize pigs. There is an approximately equal number of employees responding positively and negatively toward the questions related to their willingness to euthanize.

The SP temperament has a slightly higher response on the “some” willingness to euthanize (n=19, 57.6 percent) than the other three temperaments, SJ (n=147, 45.4 percent), NT (n=6, 54.5 percent) and NF (n=8, 47 percent). The SP temperament is considered by Keirsey (1998) to be aware of reality, adaptable, open-minded and tolerant.

Conclusion 9: Selected socio-demographic factors do have an affect on an employee’s attitude and willingness to euthanize.

There appears to be a difference in the attitude of the non-white employee’s attitude toward euthanasia compared to the white employee. The non-white employees have a more negative attitude toward euthanasia than the white employees (n=79, 40 percent). The Spanish employees are less willing to euthanize pigs than the English speaking employees. The female employees appear to be more sensitive to the pain of the pig compared to the male employees. The female employees are more likely to choose a less painful method of
recommendations to the swine industry

recognition 1:
employees who perform euthanasia should have the tools available to determine which pigs need to be euthanized. Careful consideration should be given to the process that determines which pig is sick enough to be euthanized. A step-by-step protocol should be developed for each pig age group, and proper training should be developed to ensure that each employee has a thorough understanding of the process. The euthanasia protocol should minimize pig suffering and guarantee a quick death.

the respondents agree that euthanizing a sick pig is not as stressful as euthanizing a pig that does not appear to be sick. Employees must have the confidence to determine that a pig will not recover and that euthanasia is the only alternative. A step-by-step procedure would help the employee make the determination of “too sick to recover” a more objective decision. The determination of which pigs to euthanize should not be the sole responsibility of the employee. A lack of company protocol allows for variation in the process from employee to employee. A company policy based on proven research and employee acceptance is less likely to be scrutinized by outside groups or misinformed employees. A company-approved and enforced protocol dealing with terminally ill pigs could help slow the spread of disease throughout the herd.

recommendation 2:

farm managers should determine which employees are less sensitive to the euthanasia process. There is a large percentage of employees (n=190, 49.4 percent) that would be willing to euthanize all the sick pigs on the farm if they got paid more or had more time off. Farm managers should train and utilize these employees to euthanize sick pigs and help eliminate the stress on employees that do not prefer to euthanize pigs. These employees could be chosen during the on-farm training process. Sensitivity to employee preferences could help reduce stress and job turnover.

recommendation 3:

study results show that many employees are comfortable with euthanasia methods currently in use on the farm (n=286, 74 percent). However, due to the pig welfare concerns expressed by the employees in this study, it is evident that workers are interested in and open to trying different euthanasia techniques. The adoption of a euthanasia method should consider the higher sensitivity of the spanish-speaking employees toward euthanasia.

recommendation 4:

the nursery production phase is a uniquely difficult phase of production to euthanize due to the size of the pig. The recommended bolt gun euthanasia method presents problems with employee safety. Farms should explore the possibility of using carbon dioxide gas euthanasia for this age pig.
Survey respondents agree that carbon dioxide euthanasia appears to be less painful for the pig. A company-wide protocol should be developed for any type of euthanasia method. Employees should have specified, age-related euthanasia protocol training. The survey respondents prefer hands-on euthanasia training on the farm. The second preferred method of training is by video.

**Recommendation 5:**
Training on the death and dying process could help alleviate stress associated with pig euthanasia. Questions continue to arise about “what the pig feels” during the process. Employees need training on involuntary muscle contractions and brain stem activity associated with euthanasia. The farm employees need to have a working knowledge of the dying process associated with a prescribed company euthanasia policy. Employees need to understand the importance of certain protocols, why they are enforced by the company and the importance of following them.

**Recommendation 6:**
A working farm euthanasia protocol would be helpful as a guide for new and incumbent workers. Employees must understand and follow a step-by-step procedure to ensure a fast and painless death for the pig and reduced stress for the farm employee. Farms within a company should follow the same protocol so employees could move within the company without having to learn new euthanasia procedures. This would involve a pre-employment training process for new workers and continuing education training for seasoned workers as the protocol changes.

**Recommendation 7:**
According to employee survey responses, the preferred method of training is on-farm training. The on-farm method allows the new employee to receive hands-on personalized training. The respondents prefer a company trainer to conduct the hands-on instruction. A company trainer can concentrate on training techniques that facilitate different employee learning styles. Clearly, employees want more training on euthanasia.

**Take Home Message**

Regardless of their age, gender, or ethnic background, employees preferred a method of euthanasia that was perceived as less painful to the pig. Most respondents have a personality type of ESTJ based on the Keirsey Temperament Sorter II. Most of the employees did not feel stressed by having to perform euthanasia as long as the animal appeared sick. Most of the employees viewed euthanasia of a sick pig as a humane alternative to letting the animal die naturally but some did not. A majority of employees prefer to use a process that is less painful to the pig even though it may take longer. Most of the employees wanted more training and they prefer to be trained on the farm. A majority of employees perceive blunt trauma to be the safest method for the 1 to 12 pound pig. Most employees perceive carbon dioxide gas to be safer than blunt trauma or the bolt gun method. Most employees did not have a problem performing euthanasia as a part of their daily job.
functions. However, there is a lot of variation between employees in how they think about euthanasia and how it affects them. Many object to the process and find it very upsetting. These people should never be forced to euthanize pigs. Managers should ask for volunteers and ensure they are properly trained in the methods approved for the weight of pigs they are responsible for.

Reference: