

Oregon Environmental Health Specialist Network (EHS-Net) Communication Study

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Abstract

This report is a presentation of the findings from the State of Oregon EHS-Net Project Communication Assessment that was conducted in six Oregon Counties. The purpose of this research was to assess the role of communication in foodborne disease outbreaks. Food service workers, managers and restaurant owners in six Oregon Counties completed surveys and participated in two-hour facilitated focus groups in which they discussed their styles of receiving and giving information and their perceptions of why food outbreaks occur. Six focus groups were convened for a total of 60 participants. Focus group participants were recruited through telephone calls to restaurants randomly chosen from a list of all restaurants in the County surveyed. Prep serve, Cook-serve, and Complex restaurants were represented in the questionnaires and in the focus groups. Eleven of the 60 survey and focus group participants were managers and/or owners. All focus group participants completed a survey which included demographic questions and questions about communication styles. After the surveys were completed, focus group participants discussed how they learned about food safety, how they like to receive information, how they like to give information, kinds of communication that impacts their behavior and their perceptions of why foodborne disease outbreaks occur. Research participants received food, beverages, and a financial compensation of \$75 dollars.

Telephone interviews were conducted with six regulators for a comparison on communication styles, language use and its impact on changing behavior, and on perceptions of why food outbreaks occur.

The findings from the questionnaire and focus groups reveal that the majority of participants like to receive and give information verbally. Most of the research participants came from low-income backgrounds and many continue to live in poverty. Poverty is directly linked with oral cultural communication styles (Fulford, 1999, Ong, 1992).

- ✓ Focus group participants reported that they were most likely to change the ways in which they handled food if the information was:
 - given verbally,
 - shared with them by someone they know, told in a story, repeated and the appropriate behavior shown to them, and
 - they were more likely to change behavior if they were regularly recognized and rewarded for the new behavior.

- ✓ Food service workers reported that much of the food safety information is presented in print or verbally in unfamiliar abstract language from someone who has power over them.

Regulators are viewed as someone who does not understand the experience of working in food service. Food service workers stated that when a food safety process is introduced, the new behavior is often not modeled or made a priority in the restaurant environment. This lack of modeling of the appropriate behavior sends messages that the behavior is not important.

Participants also report that the language and examples for explaining why the behavior is necessary is often not familiar or related to their "lived" experiences.

Participants identified a number of communication factors that influenced their behavior in the restaurant environment.

Communication methods identified as not impacting behavior included:

- ❑ information provided in books or articles;
- ❑ information presented using jargon or "big" words;
- ❑ information provided people who did not know them or by people who had negative "power" over them;
- ❑ time pressure/stress creating apathy;
- ❑ information presented one time; and
- ❑ Information presented, but not practiced by those presenting the information and information presented using examples that did not relate to their life experiences.

Communication methods identified as having a positive impact on changing food-handling behavior included:

- stories and sayings with vivid examples to allow food workers to “feel” the impact of a behavior;
- role models who showed and modeled appropriate behavior in supportive ways;
- information provided by people they had developed relationships with who use familiar words and examples that they could relate to;
- verbal information provided often and repeated regularly;
- Eye contact and simply worded signs posted as reminders.

These findings of food service workers’ preferred communication styles are consistent with the literature on oral culture styles of sending and receiving messages.

The findings from the interviews with regulators revealed that food safety regulators are primarily operating from a print culture communication style. Five of the six regulators interviewed identified themselves as having grown up in a literate, middle-class environment. One participant identified as growing up working class.

All six participants reported that their parents were literate and their primary style of getting information was through reading.

Print culture communication style is shaped by how the adults in the life of a child get their primary information. This would indicate that the regulators interviewed likely demonstrate print culture communication style.

While print culture was identified as the dominate style of communication for the regulators, three of the six regulators were aware of the importance of developing relationships, communicating verbally, and repeating the food safety information in as many ways as possible.

These communication methods are characteristic of oral culture communication style. Ong (1992) found that balance between oral and print culture communication styles is the ideal for the most effective communication. This means that the communicator is able to use the skills and characteristics of oral and print culture communication as situationally appropriate. Although three of the regulators valued oral culture communication techniques, all six regulators stated that the print culture style of communication dominates in food safety. Regulators feel that the regulatory system promotes and values only print culture communication methods.

All six regulators reported that work load and time constraints would not allow them to do their job in a more relational, interactive communication style.

Data analysis of the interviews with regulators revealed that knowledge about food safety is overwhelmingly presented in abstract, linear, print culture styles of communicating (i.e. the food handler's book, fliers, and brochures). While some Counties offer classes, regulators reported that they are predominately presented in a lecture format with little interaction. It is important to remember that *Oral Culture* communicators require interaction to internalize the knowledge and to change behavior.

Regulators described their interactions with food-service workers during inspections as mostly limited to completing standard forms and if verbal interaction with the food service community occurs, it is generally convoluted with power dynamics. Time, a priority in print culture, is prioritized over developing trusting relationships necessary for educating and changing the behavior of oral culture communicators. Regulators identified five barriers to communicating food safety information more effectively.

These barriers include:

- ◆ Lack of time for interactive inspections
- ◆ Regulator/food service worker power dynamics
- ◆ Lack of knowledge and skills for communicating across cultural and poverty barriers in the regulator community and
- ◆ High turnover in the food service industry, and the organizational culture in which they work.

Analysis of the data from surveys, focus groups, and individual interviews with regulators reveals serious breakdown in the ways that food safety information is sent and received. Distinct differences in the communication styles of the regulatory community and food service community do not allow for food safety information to be internalized in ways that could change the behavior of food service employees.

Recommendations for improving food safety communication include:

1. Culturally competent communication training for regulators, restaurant owners and managers that are focused on improving knowledge and skills for communicating food safety information more effectively across poverty and cultural barriers.
2. Increased communication about food safety in the context where food service workers will be using the information.
3. Emphasis on interactive food safety education as a primary role for regulators
4. Assessment of policies and practices in the regulator system to ensure flexibility, valuing, and support for regulators to use oral culture communication methods.

EHS NET Communication Study Background

There is a discrepancy between knowledge and behavior----“even when food workers possess knowledge of safe food handling practices, they do not always handle food safely” (Green & Selman, 2003).

This communication assessment explored the role of communication styles in foodborne disease outbreaks.

Behavior is motivated by values and interpretations of situations and events (Burke, 1990). Values that are imprinted in childhood will impact what adults perceive as important. Behavior changes are more likely to occur when messages are communicated in ways that are framed from the receiver's worldview, context, and priorities.

Scholar and researcher Walter Ong were the first to discuss distinct communication differences by social economic status (SES).

People from lower-class backgrounds receive their information primarily by word-of-mouth or verbally creating an "oral" culture thought process.

Oral culture communication style creates specific characteristics and styles of communicating including, such as relationship focus, spontaneous, big picture focus, repetitive, emotional, and present oriented.

Many people from middle or upper class backgrounds gain their daily life information from reading, creating a "print" culture thought process. Reading for primary information, also develops a style of communicating and specific characteristics for interacting such as:

- linear, abstract, analytical, ability to separate and disconnect
- ability to focus and delay gratification
- skills for goal setting and planning ahead, and
- Skills to break things into parts.

From these two styles of receiving information, two distinct communication styles emerge.

First, How information is communicated and received shapes how and if we internalize the information and how we respond (Adler & Town, 2002). Having rote knowledge of food safety to "pass a test" or to "get a job" is very different than internalizing the knowledge in meaningful ways that motivate behavior changes.

Oral culture communicators devote a great deal of attention to sensory information.

Orality emphasizes the connection to the environment and to the people in it. Oral culture communicators are “high context” communicators.

Much of the meaning is interpreted from the context where the communication takes place (Ong, 1982).

Second, ***Print Culture*** is a learned way of relating to the world where people learn to process and analyze (breaking things down according to parts) information collected through sight, sound, hearing, touch, and smell according to categories, classifications, and styles of reasoning developed by reading. When people read for their primary information, a communication style emerges that encompasses the skills needed for reading. The letters in the word “linear” do not mean anything unless they are in a particular order. Print culture communicators tend to organize their thoughts and communicate in a detached, linear style. In reading, knowledge is outside (on paper) of the *knower*.

In oral culture, the knowledge and the knower are one. The oral communicator is not separated from the “subject” being discussed. It is their tone, gestures, and expressions that give meaning to the message. In print, there is no emotion. Only what the reader gives it. Print culture communicators learn to separate from the subject being discussed and they learn to disconnect from their emotions.

Print culture communicators are “low-context” communicators. They separate the meaning from the context in which the communication occurs. Print culture teaches people to apply the communication in multiple contexts because the knowledge is separate from the knower (Ong, 1982).

Print culture communicators tend to be task oriented and they do not need a personal connection in order to communicate.

Meanings are in people, rooted in the context in which they grow up. How many is “a few?” “A lot?” or “Some? Accurate responses to these questions require a context. If a context is not part of the communication, responses to these questions will depend on what the communicator was taught in their context. The print culture communicator generalizes to other contexts. Culture and social-class context shapes interpretation and meanings of messages being conveyed. Oral culture communicators who come from poverty have distinct communication needs and styles. If the messages about what causes foodborne disease are communicated in ways that are not meaningful based on their past experiences and current context, they are unlikely to change behavior that makes sense in their context.

Poverty conditions also shape communication styles. Ong (1982) found that people living in poverty tended to display the characteristics of oral culture communicators. The context of poverty compounds many of the oral culture characteristics described above. For example, oral culture teaches people to be “present oriented.” This is because once a word is spoken, as soon as it is spoken, it is gone. If an oral culture communicator is not “present” they will miss the information. Poverty teaches people to be “present oriented” and to stay focused on the here and now. People in poverty are often worried about whether or not they will be able to pay their rent or buy food. This context of living in poverty requires that subsistence issues are a high priority. Issues that are of priority to *Middle-class Print Culture* communicators may seem irrelevant to those experiencing poverty conditions. For example, hand washing is a low priority when hunger or risk of eviction is on a person’s mind. Similarly, the response to monitoring food temperature may be of low priority to someone whose focus is on making sure they have something to eat. For people from poverty backgrounds, having access to water may be their focus. In 2004, the Water Bureau in Portland, Oregon reported shutting off water to 350 families a day. This can impact how the rule of “hand washing” may be received. The receiver may interpret the message to wash hands for safety with an attitude of, “I don't wash my hands at home and no one gets sick.” Different values and priorities can result in different understandings of messages.

Oral culture teaches people to trust people they know for information on how to live your life. An oral culture communicator is much less likely to follow rules made by someone that they do not know. Similarly, oral culture teaches a focus on relationships. Relationships are how oral culture communicators you get the information to live daily life. Knowledge and worldview are based on those connections.

For example, if my Grandparent left her chicken on the counter all day long, than that is the way it should be. Another factor impacting how a message is received and whether or not behavior changes is that oral culture people store knowledge in their short-term memory. Knowledge not used in their daily lives is discarded. Short-term memory can only hold so much information.

The oral culture communicator who lives in the context of poverty may not have the resources or knowledge to practice the food safety behavior in their home. This could account for knowing or being told the food safety rules, but not practicing them in the workplace.

In addition to the “meanings are in people” concept, the issue of “how” a person receives information can play a critical role in whether or not they internalize the knowledge. Oral culture communicators receive and process verbal information. If the primary methods for conveying food safety rules are by print, people from an oral culture background will likely miss or devalue the information.

Based on the premise that the food service regulators primarily exhibit print culture communication styles (i.e. regulators come from more literate middle-class backgrounds), and the food service regulated communities tend to come from lower SES backgrounds and therefore, exhibit oral culture communication styles, there is a high probability of misunderstandings in the communication between the two communities. This study explores the role of communication in foodborne disease outbreaks.

Study Design and Objectives

This assessment of communication across poverty barriers is a three-phase study design. Phase one involved gathering data. In phase two, survey data was analyzed and clarified to ensure shared meaning. This was accomplished by requesting regulators, restaurant managers, and food service workers to share their experiences related to communication. This phase also involved learning about individual attitudes, perceptions, motivations, behavior, communication style and communication challenges that shape interactions. Phase three incorporates findings from surveys, focus groups, and interviews to develop recommendations for improving communication competencies across poverty barriers. Below is a summary of the three phases.

Phase 1

- Identification of research participants.
- Develop survey instrument with the goal of identifying perceptions concerning interactions between the food service community and the food regulator community.

Phase 2

- Analyze data
- Identify topic areas from the survey findings and used information to develop focus group questions
- Conduct focus groups

Phase 3

- Analyzed data
- Present report with recommendations

The overarching research goal is to achieve the following four objectives:

- Provide feedback - to create an accurate picture of the level of communication that exists during specific interactive elements occurring during an outbreak investigation or routine compliance inspection.
- Provide baseline data for future studies - the role of communication as an antecedent for food-borne disease has yet to be explored. This project is designed to illuminate communication issues and specific interactive elements occurring during an outbreak investigation or routine compliance inspection.
- Make latent issues public – A communication assessment can uncover communication assets and problems that might not have been openly recognized or discussed before.
- Identify development needs - Through the communication assessment, determinations can be made for reducing food outbreaks by modifying and improving the regulatory system as well as identifying the interactive communication elements occurring during an outbreak investigation or routine compliance inspection in which areas for training are needed or desired.

Methodology

The methodology for collecting data consisted of the following:

1. A communication assessment questionnaire containing 25 close-ended questions and two open-ended questions.
2. Six regional focus groups each with approximately ten food service workers, managers and owners.
3. Regional interviews with six food service regulators.

Participants were chosen based on the following process: the project coordinator used random selection to identify six cities representing different regions of Oregon for participation in the communication assessment: Those cities were Bandon, Eugene, LaGrande, Ontario, and two Counties in the Portland Metropolitan area (Multnomah and Washington).

Restaurants were also chosen to ensure participation represented the three EHS NET food categories: prep serve, cook serve, and complex. The project director contacted the selected restaurants and requested volunteers over the age of 18 for the communication assessment.

Food service workers were paid \$75.00 for their participation in the two-hour focus group. They also received food and beverages during the focus group.

The rationale for this approach is based on the belief that a cash incentive is necessary when requesting time from low-income participants. Often people with low incomes do not participate in research because they have to earn money to meet their basic needs.

Each focus group participant completed a questionnaire and then participated in a two-hour focus group. The questions related to communication styles including styles of receiving, interpreting, and sending information. The questionnaire data is included in Appendix A.

Appendix B describes oral and print communication characteristics by social class. Telephone interviews were conducted with six randomly selected food regulators to compare communication styles and perceptions of why foodborne outbreaks occur.

Questionnaire Findings

The findings from the questionnaire support the initial premise of this study which entailed that food service workers are likely to exhibit characteristics of oral culture communication styles that are linked to low literacy levels and to poverty (see full-data results in appendix A.).

In worldwide studies of poverty and oral culture, Walter Ong (1982) found that people living in poverty tended to display the characteristics of oral culture. The food service industry tends to pay low wages and therefore attracts many people with limited education and literacy. Therefore, this cohort would appear to be ideal for this type of assessment.

Participants reported that most of their Grandparents and Parents had limited education. Nearly half (42 percent) of the study participants reported receiving their high school equivalency G.E.D. as their highest level of education completed. It is worth noting that the average income for a person in the U.S. with a high school diploma or less is \$17,000. For a person with a four-year degree, the average income is \$46,800 (Census, 2002). Therefore, income levels of participants in this assessment were overwhelmingly below the Federal Poverty Guideline of 18,810 for a family of four.

Sixty-two percent of the participants reported incomes below \$15,000 and 22 percent reported incomes between \$15,000 and \$25,000. Limited education and poverty were characteristics of most food service participants in this study.

Poverty conditions potentially compound the influences of oral culture. Almost half of the food service participants were raised in single parent homes, which are more likely than two-parent homes to be low income. People in poverty are less likely to receive an education and more likely to struggle with literacy (Mortenson, 1998).

Participants in this communication assessment reported that the majority of their parents (75 percent) would “ask” other people when they needed to know information.

Receiving primary information verbally shapes the way people interact and the ways in which information is processed (Ong, 1982). When people read for their primary information, they learn to process information in a linear, sequential order.

When people “talk” to others when receiving information, they learn to focus on the big picture and gain meaning from their context. Eighty-percent of communication is non-verbal (Adler & Town, 2002). The meaning being conveyed is not only in the words, but also the tone, gestures, and the context in which the information is conveyed. This has important implications for how people are “taught” food safety practices.

If the context (i.e. the physical environment) is an important part of the communication for oral culture people, it could be important that such information is presented in the context in which they will be practicing and using the information.

One quarter of the participants had relatives or friends who could not read. More than half of the participants reported struggles with vocabulary in school and with not having information that everyone else seemed to know. Only one-third of the participants reported that they were read to as children. Low levels of literacy is a primary predictor of oral culture communication style. How a person receives information shapes how they relate to others. Relationships are key for oral culture people because they primarily get their information from asking other people. The relationships for oral culture people are based on trust that requires identification with the person whom you are receiving information from. Because oral culture people are relying on this type of information for getting through their daily lives, they tend to place high value on identifying with the people who are providing the information. Kenneth Burke (1990) writes that relationships based on identification require that each communicator see how they are “like” the other. In other words, they must have self-disclosed enough to find common ground. If the identification does not exist, there is no trust and information is suspect (Ong, 1982).

This relationship-focused approach of oral culture is also evident in the reading materials in participants' homes. The number one reported reading material was tabloids. Tabloids focus on people, relationships, and telling stories, which are primary characteristics of oral culture. The “Enquirer” and the “Star” tabloids outsell the “Washington Post” and are purchased primarily by low -income people.

Oral culture people learn through watching, doing, and listening to stories (Beegle, 2000). The tabloids tell stories full of emotion about relationships. For oral culture communicators, storytelling is a primary method of gaining information.

Data from two open-ended questions

Data from two open-ended questions helped to clarify desired communication styles and support foundation that food service workers would like to have. The questions and most frequent responses are discussed below.

1) ***“What were the three most important supports that help you communicate with people who may have different communication styles? Please list them in order of importance”***

The most frequent response to this question pertained to attitudes when communicating (29 percent), such as, be friends, don't judge, make small talk, have a positive attitude, have patience and find common ground. The next most frequent responses were listening and speaking (21 percent), using body language hand gestures (21 percent), and rewording or rephrasing (19 percent). The least common responses pertained to writing the other person a message (3 percent) or having someone else talk to the person (2 percent).

2) ***“What are three supports you would like to have to help you to better understand food borne disease”?***

The most common response to this question pertained to having better communication with food service regulators (59 percent) with an emphasis on “being more personal, using easy to understand language, and being helpful.” One respondent wrote, “Health department people need to come around more to just check in and build relationships in a more friendly environment.” The next most frequent response to this question was having more opportunities to see what food handling practices can make people sick (32 percent).

In these responses, respondents often reported that they did not believe some of the food information that was taught. A general theme was “Some people make a big deal out of nothing and they try to scare everyone, but if I have a better chance to see how it could make someone sick, I would be more likely to understand why it is important to do what they ask me to do.”

The next most frequent theme was having more hands on training (24 percent).

Participants wanted opportunities to practice the safe food handling behavior that was often new and unfamiliar. They also wanted to be told that they are “doing it right.” A respondent wrote, “I think I know what to do, but sometimes I am not sure and I wish I had someone I trust to watch me and tell me if I am doing it right.”

Training, education and conferences were the next most popular response at 13 percent. A request for informational videos was at eight percent. Respondents identified books or information on food safety (11 percent) as additional communication tools that would help them in their work. Having signs, stricter requirements and more knowledgeable managers were each at two percent.

Responses to what supports help you to communicate with someone who may have a different communication style revealed a strong preference for relationship building.

Finding common ground and being friendly were listed in 78 percent of the responses as a top support they employed as a means for understanding others.

The next section reports findings from the focus groups with food service workers, managers, and owners.

Focus Group Findings

A total of 60 food service workers, managers, and owners participated in the focus groups. One attribute of the focus groups was they helped build on the communication insights gained from the questionnaire. In these focus groups, participants described food safety communication methods that were not effective means of impacting their behavior. Six of the eleven managers/owners reported getting their primary information from print. Managers/owners overwhelmingly agreed with food service workers when it came to discussions about food regulator's communication.

Many of the ineffective communication methods reported by managers/owners and food service workers stem from print culture style communication. Print culture communication style emerges from reading for primary information (Ong, 1982). Reading trains the brain in very specific ways and impacts the ways in which we communicate and interact.

As mentioned earlier, characteristics of print culture include: linear thought and organizational process, task oriented and focused, an emphasis on “time,” abstract and analytical style of thinking and communicating, disconnected from emotions, ability to delay gratification, and abilities to strategize, plan ahead, and set goals.

The majority of focus group participants reported these thought process characteristics and styles of presenting information are least effective for understanding food safety.

Food service participants reported that most workers learn food-handling procedures by reading the food safety book and taking a food handler’s test. However, participants shared that the rules and procedures are memorized only long enough to pass the test.

“Now that the test is on line, you don't even have to memorize it, someone who knows it can do it for you.”

Once they begin working, knowledge gained from reading the food safety rules is often not retained or practiced. One employee wrote that, “It is hard for people to keep the knowledge from the food handlers' test. A lot of people read the manual just to pass the test so they can get themselves an income to live on.” Another participant shared, “I think that not all the information is sinking in when people have to take the food handlers' test. You read the pamphlet 15 minutes before the test and try to memorize the key points, but after you pass the test all is forgotten.” Another reported, “Employees are given a notebook to read through that has all the food handling information in it. You read through it and that is all you do.

No one really shows you what the information means or how to do it in your situation and sometimes, the safety information doesn't make sense. I mean, you're in a rush, people are waiting for their food, your boss is yelling at you to hurry, who's gonna take the time to wash their hands?"

Six of the eleven managers/owners reported different perspectives regarding whether food safety information in print was helpful. One manager's comment reflects the general response. "The information is in the book, if they really care about learning. Some food service workers are just too lazy to read it." More than half of the managers/owners stated that they liked getting their information from reading and that they thought their workers should put more effort into reading food safety rules. Such comments reveal a lack of understanding of how oral culture communicators learn and process information. Oral culture communicators rarely retain information presented in print unless there are multiple opportunities to see the behavior modeled and to try the behavior in their setting.

The majority of focus group participants (87 percent) do not believe you can effectively learn food safety information from reading a book and taking a test.

Participants reported the most effective ways for learning and practicing food safety information was “hands on” opportunities in their own restaurants. “It's hard to practice food safety when your manager doesn't do it or place value on it. It's also hard when you don't see the inspectors doing it they are just talking. I'd like to see them stay true to food rules during a rush time.”

Time pressure and stress creates apathy in the food service environment. Participants discussed not having enough time to follow proper procedures.

One participant shared that, “If you are in such a rush period that maybe you have to hurry orders through, you may not do everything ‘by the book.” And another participant stated that, “...when they are in busy-time, I think that those rules are compromised because they can't keep up and cut corners.”

Managers/owners (seven of 11) reported that the food safety rules did not make sense in their restaurant. “”The standards are often for big restaurants and we do not get any help on how to implement the rules in a small environment.” Another manager said, “I am a small operation. I should not be held to a standard that does not work for me.”

Food service workers also shared that they did not always follow proper procedures because the food safety information presented is not practiced by those presenting the information.

The new behavior required for food safety is often not modeled or made a priority in the restaurant environment. When management does not always follow proper procedures, workers are likely not to either. ‘If you see your boss mishandling food, it makes it a lot easier to do so because handling the food correctly takes time.’

Some participants shared that they had been reprimanded by management for taking the time to follow safe food handling procedures, particularly in rush hours.

For example, one food service worker stated, “Some people just get in a rush and will get penalized for taking extra time to wash their hands because the boss gets angry because the customers are waiting.” Another worker reported that “Management can be more concerned with economics than food handling safety. Management doesn’t enforce safety practices/procedures and the owners are mostly concerned with the overhead.” One food service worker said, “Often businesses that are lacking in funds cut corners in order to increase productivity at the cost of safety.” Participants discussed how important it is that for regulators to help managers see how it is to their advantage to practice food safety.

Managers/owners reported that they have to make a profit to stay in business and they do not want regulators presence to impact customers. Managers/owners reported (five of eleven) a desire for inspectors to show them how they could implement food safety practices in their business.

Mixed messages about priorities in their context, such as impractical rules, along with a lack of modeling of appropriate food safety behaviors. These were dominant reasons identified as to why food service workers were not changing their behavior.

A critical characteristic of oral culture communication style is that “knowledge not used and internalized in the context of the oral culture person, is discarded” (Ong, 1982). The reason for this communication characteristic is that oral culture people store their knowledge in short-term memory, which can only hold so much information.

They do not “keep” information outside of themselves (i.e. making notes, keeping a list, and so on). In print culture, needed knowledge is stored outside of the person (in books, articles, notes, brochures, etc.). Print culture communicators can write down a piece of information, then go back to it later if they needed it be repeated. People who receive their information verbally must find mnemonic strategies to remember content.

There are three mnemonic strategies used frequently by oral culture people to retain information:

- 1). Putting the information into a story with real experiences and people that they can relate with.

- 2). Having the information as part of a story that makes them emotionally feel the impact or consequences of the information (Oral culture communicators rely heavily on emotions and feelings. When they feel something, they generally internalize the information and do not forget it.)
- 3). Repeatedly “doing” and practicing applying the information in their context. If the knowledge is not practiced, and repeated in ways that make sense in their context, oral culture people must discard the knowledge to make room for information they need to live their daily lives in their context.

Food service workers reported that much of the food safety information is presented in print or when it is verbal, it is in unfamiliar abstract language from someone “they don't know” that has “power over them.” One focus group participant said, “Food inspectors tend to come in use a bunch of big words, check off their list and leave. That is just not helpful.” Another participant said, “safe food handling information is not helpful when the inspector acts like they are all powerful and they just drags on with their fancy words.” Many of the focus group participants described situations where they “knew” the inspector was coming and everyone would “clean like crazy” and try to do exactly the “right” things. “Then, when the inspector leaves, everyone goes back to doing it the way they always do.” The inspector is not someone who is respected or seen as someone they are in “relationship” with.

The inspector is “other” and takes on the role of “police,” or someone to hide things from, rather than someone to learn from and someone to get helpful information from. One participant describes how “the inspector never even looks at you.” These statements reflect both the low literacy (use of “big words”) and the importance of relationships for oral culture communicators.

Focus group participants overwhelmingly said it would be helpful if the food regulators were more “friendly and personable.” One worker suggested that the “Health department people need to come around more to just check in and build relationships and create a more friendly relationships with food workers.”

It was also suggested that “they should make education as big of a part of their job as judging the restaurant and the workers.” One participant stated, “If the inspectors can't be trainers, maybe the health department can send “trainers” around to the restaurants in addition to “inspectors” so there is not pressure or threat and people could actually learn more about food safety in their workplace.” Managers/owners (52 percent) reported that inspectors were not someone they trusted. “Inspectors tend to be negative, so I lay low.” Another manager stated, “they come in here looking for something wrong so that they can write you up.” Managers (72 percent) felt regulators should “put more energy into teaching, not judging.”

Information presented one time only was also not helpful in encouraging workers to follow proper safety procedures. Oral culture requires repetition. Food service workers would like to have more interactive education classes, conferences put on by other food service workers who they could identify and relate to, more posted signs, and storytelling videos. One worker claimed that “not handling food safely is because of not enough training in food safety where we work,” and “we need more easy-to-read and understand signs.” Another worker said, “I believe that when someone is shown the correct way and have simple signs reminding him or her, food handling will improve.” Oral culture communicators need mnemonic devices to remember information that they are not using at home. Managers/owners echoed this theme. If the safety practice was practical, they were more likely to model and enforce it.

Information presented using examples that do not relate to food service workers' life experiences are not influential in changing behavior. For example, many focus group participants reported that they do not follow proper food handling procedures because they don't understand or see consequences that their behavior can make someone sick. If workers have not personally experienced someone getting sick from improper food handling, then they don't believe the food safety rules and procedures are applicable. “If a person has not had the experience themselves or someone else like a family member or friend getting sick then they assume the way they are doing things is all right.”

Other respondents wrote that, “Food handlers don’t think they have a disease, or are carrying one, so it’s OK to mishandle the food. It won’t do any harm,” and “they feel that a negative outcome from this risky behavior will not happen to them.” Managers were in agreement with food safety workers on this issue. They had not been involved in an outbreak and therefore, did not believe it would happen to them.

Vivid stories about the consequences of unsafe food handling were frequently retold in the focus group setting and participants reported major behavior changes as a result of hearing the consequences of unsafe food handling and their impact on “real” people who were “like” them. An example of this was the “baked” potato story. Participants in four of the six Counties brought this story up and told of how powerful it was to hear the woman who had gotten sick from unsafe food handling describe its impact on her health and her life. They saw her as a “real” person, someone like them and believed that what happened to her, could happen to them. This made the food safety process for baked potatoes relevant in their context. Storytelling is the way oral culture people pass on information. This characteristic can be a valuable tool in providing more effective food safety information.

Eight of the 11 managers reported that food service workers do not care about food safety. “You tell them what to do and turn your back and they do what they want.”

Managers/owners cited high turnover and unwillingness to comply as reasons why food safety is not practiced. A theme among the food service workers was also that food service workers “don’t seem to care.” None of the respondents themselves said, “I don’t care,” but many claimed that other workers don’t follow safety procedures because “they” don’t care. “For some people in the food service industry it is ‘just a job’ and they simply don’t care about safe practices to ensure the well being of the customer.” “Not caring could be another sign that workers have not internalized the food safety knowledge and/or they do not “feel” the consequences that unsafe food handling are “real.” Oral culture communicators are concrete experiential learners. Unless they experience the outcome or identify with someone who has been impacted by the unsafe behavior, they continue to see it as “some rule someone made up that makes no sense.” One participant stated, “I don’t think the problem is people not being educated about food handling. I think it is because they have the attitude of ‘it could never happen to me.’”

If safe food handling procedures were not taught at home, as a child growing up, then many workers do not bring that knowledge with them into the workplace. As one respondent explained, “I think that we are brought up handling food in the home, but the standards in a restaurant different and are much more strict.

We are not really taught why this is so important.” If someone got sick at home because of mishandling food, I’ve never known about it.”

As indicated in the demographic data, many food service workers experience low income and poverty conditions that do not always allow for “safe” food handling (i.e. How do you keep food cold if your electric is turned off and you have no money for ice?). Those who grew up in poverty may not have had the opportunity to learn how to handle food safely, as one participant shared wrote, “I think a lot of people are working so hard, they don’t always have the time to teach their children how and where food comes from.”

Another participant wrote that, “If you are a person that grew up in an environment practicing safe food handling methods, then you are more likely to follow the procedures.”

The context of poverty is one of “making do” with what you have. A focus group participant said, “Sometimes this means you don't get to cook your food or you leave food out that shouldn't be left out. If no one gets sick, you come to believe that no one ever would.”

It is important to note that managers/owners did not consider living conditions as possible reasons for non-compliance.

Related to the context of poverty, many food service workers are completely reliant on their jobs for survival. They can not take time off from work when they are sick.

One participant shared that, “Food handlers tend to work when sick due to low wages, we have to work.” Another participant described a lack of understanding by managers and owners when they were genuinely sick, “I call in sick and they say, 'Yea, right, you want a job and you'll get well real quick.' What am I supposed to do, I need my job, so I go.” Many of the food service workers suggested that the Health Department could play a role in advocating for better work conditions by helping owners understand the importance of not coming to work sick. They also suggested that Health Departments and restaurant owners could work together to help them “figure out how to get sick pay.” Managers/owners had a different perspective.

Ten of the 11 perceived that food service workers do not “tell” when they are sick, or they were “trying to get out of work.”

A major portion of the focus group discussions was focused on gaining input for how to change unsafe food behavior and attitudes that disregard food safety processes. Focus group participants were clear, the answer lies in better communication and better relationships between the food service workers, managers, owners, and health regulators. Effective communication shapes behavior.

Information presented from a middle-class frame of reference in a print culture style will not be internalized by oral culture communicators, unless it is framed in a way that are meaningful to their context (Beegle, 2003). This concept matches what one participant stated, “Strict rules and consequences may temporarily combat the problem of unsafe food handling when someone is watching, but will never truly change everyday behavior. Rules and consequences cannot make people care. We need to believe it's important.” Managers/owners reported a desire to have inspectors, “work with them and help, not judge.”

Regulator Interview Findings

Telephone interviews were conducted with six randomly selected Oregon food service regulators. Four of the six interviewees were male. All interview participants were between the ages of 42 and 61. Participants were guaranteed confidentiality to increase information sharing. Interviews lasted from 60 to 90 minutes (see appendix for interview questions) and were conducted during work hours. The focus of the interviews was to gain insight into communication styles of the regulators and to hear from their perspective why food outbreaks continue to occur even though we have information and knowledge to prevent them.

Regulator communication influences

In describing how their parents learned new information, four of the six regulators reported that their parents would seek reading materials when they needed new information. How the adults around a child receive information to live their daily lives impacts their dominant style of communicating as adults. The regulators who grew up with adults who primarily used print, as their source of information will likely communicate in a “print” culture style. Two of the regulators reported that their parents would both read and ask others when there was something they needed to know.

Ong (1982) describes the influence of both styles of receiving information as “balanced” communication. Balanced communication is the ideal for effectively communicating across social class barriers. If a communicator has characteristics and communication styles from both reading and asking, they are able to use the communication skills as situationally appropriate. If they are communicating with low-income oral culture people and they need to develop relationships and repeat information, they are able to practice that. If the situation calls for print culture communication such as linear, abstract styles, they are also able to effectively demonstrate that communication style.

Social class is a reliable predictor of communication style (Beegle, 2000). People, who grow up in poverty, tend to display the characteristics of oral culture. Those who grow up in middle-class environments with literate parents, tend to display the characteristics of print culture or of balanced communication if their parents both read and sought information from other people (Ong, 1982). Five of the regulators reported growing up “middle class.” “Middle class” was defined as having at least one college educated parent who held a professional position. The one regulator that did not report growing up in a middle-class environment reported growing up with literate parents who were working class.

“Working class” was defined using Barbara Ehrenreich's description of the working class, living paycheck to paycheck, with not a whole lot left over, but always knowing that the check is coming”(2002). This regulator's father had some college and the mother had a high school diploma. This regulator was one of the two regulators who shared that her parents would both read and ask for their information. All six of the interviewees grew up with literate parents indicating a probability of print culture communication styles.

To better understand the communication styles of regulators, they were asked how they currently get new information when they need to know something. Five of the six reported that they would read articles, books or go on line. The sixth regulator reported that he gained information from both reading and verbally communicating with an “expert” or someone who could provide him with the needed knowledge. The influences from their childhood would indicate that all six regulators had dominant print culture communication influences.

Communication Breakdown

The data analysis of the regulator interviews revealed six communication-related areas for explaining why foodborne outbreaks continue to occur. The six areas identified included:

1. Lack of time for interactive inspections
2. Rigidly defined inspector roles
3. Power dynamics between food regulators and food service workers
4. Lack of active listening skills
5. Use of terminology or unfamiliar language
6. Policies and practices of the regulatory system

The first communication barrier identified by all six regulators was a lack of time for inspectors to do “interactive” inspections. An interactive inspection was defined as an inspection that involved working with operators and food service workers to identify how food safety practices can work in their context. One regulator stated that “this approach is by far the most effective, however, it requires time and interpersonal communication skills to develop relationships and trust.” In this area, four of the regulators interviewed seemed to have an excellent understanding of the need for developing relationships with food service workers and for applying the food safety concepts in their setting.

They were not aware of oral communication or print communication as a field of communication study, however, they described important characteristics of oral culture in defining interactive inspections.

Four of the regulators reported that they believe “most regulators do not have communication skills necessary for getting their messages across.” All of the regulators reported that most inspections are far too standard and detached from the restaurant inspected. One regulator stated, “We spend the same amount of time on a prep serve restaurant, as we would a cook serve or complex restaurant. Each require different amounts of time, but that's the way it is.”

The second area defined as a barrier to effective communication was their defined roles and workload as inspectors. Priorities such as completing paperwork, sharing standard food safety information and moving through as many inspections as possible to keep up with workload were described as “getting in the way of better communication with food service workers.” Inspectors reported that it “looked like they were doing their jobs if the check-list was completed,” but they have no way of knowing if they have communicated with operators and food service workers. One inspector reported that “We are not rewarded based on ensuring there is a communication feedback loop.”

Four of the regulators described their workload, as incompatible with communication deemed necessary for impacting food disease outbreaks.

A one-way communication style was most common for five of the six inspectors interviewed. Inspectors shared that “they said what they had to say and went to the next facility.” Inspectors reported that they have no way to know if their communication was effective or even heard. One regulator stated, “Unless I hear of an outbreak at one of my places, I assume they got my message.”

Power dynamics was identified as the third most common cause of communication breakdown between regulators and food service workers. While none of the inspectors interviewed identified this as their own issue, all reported that many inspectors that they have worked with operate on a “use your authority to show them you mean business” approach. Three regulators reported that the regulators, who had trained them, had used this approach. One described the following scene that occurred on his first inspection with the regulator who was training him.

“We stopped at this restaurant and began the inspection. The inspector who was training me yelled at the food service worker about some dirt on the wall. It wasn't a big deal, but he made it one. He found a few more reasons to scream at them and mark them and we left. We got into the car and he said, 'Oh I just love getting in their face, don't you.' I said, no, actually I don't.”

All six regulators interviewed reported that a lack of time was also related to the power over communication style. One regulator stated that, “We don't have time to teach them, so often we just tell them to do what I say.” There was consensus among the six regulators interviewed that more often than not, the control by authority approach was used to communicate food safety rules.

Use of terminology or unfamiliar language was the fourth area identified as a communication breakdown area. Regulators shared that there was little if any time to explain food safety terminology in ways that made sense to the food service workers and operators. Two regulators reported that it was the operators' responsibility to educate themselves and their workers to understand the language of their field. “We can't teach them food safety terminology. They should know that before they are hired.” One regulator had a different view. “It is our job as regulators to make sure when we are doing the inspections and giving information that they understand the language we are using. We should use the terminology of food safety, but only if we take the time to explain what it means.”

Four inspectors reported that very little active listening happens to ensure understanding of the food safety practices. “We need to understand the food safety issues and barriers from the perspective of the food service worker.

Then and only then can we begin to solve foodborne outbreaks.” Another regulator expressed frustration that he rarely has “time to listen.” Four regulators believed outbreaks would be reduced if there were more listening to the food service workers and joint problem solving. As one regulator put it, “One size solutions do not fit all.”

Regulatory policies and practices were identified as not matching the reality of the restaurant environment. Staff turnover and staff coming to work sick were also top areas identified by inspectors as communication breakdown. Four regulators described efforts to keep up with the turnover, but felt it was an impossible task with their workload.

Regulators reported that for some facilities, there is an entire new staff every six months and regulators are not able to connect and educate new employees.

“This is a huge issue and the regulator system is not set up to address the realities faced by the food service industry. The policies often do not match what is really needed.”

Recommendations

The findings of this study contribute to the understanding of the role of communication in reducing the incidence of foodborne disease.

This Oregon EHS NET communication study identifies a number of communication factors that influence behavior in the restaurant environment. Communication methods identified as having a positive impact on changing food-handling behavior were consistent with oral culture communication styles. They included:

- Stories and sayings with **vivid examples** to allow food workers to "feel" the impact of a behavior;
- Role models who showed and **modeled appropriate behavior** in supportive ways;
- Information provided by people they had **developed relationships** with them, who use **familiar words** and examples that they could relate to
- Verbal information provided often and repeated regularly; eye contact; and simply worded

Communication breakdown between regulators and food service workers was most evident when print culture styles of communication were used to convey food safety practices.

Food safety regulators are primarily operating from a print culture orientation in a system that promotes and values print culture communication strategies such as presenting the information impersonally, in print, out of context and not personalized to increase an understanding of why the behavior is necessary. Knowledge about food safety is often presented in abstract, linear styles that do not meet the concrete holistic style of oral culture communicators. Food safety is taught mostly through print, (i.e. Food handlers book fliers, handouts, and checklists). While some classes are offered, many are presented in a lecture format and do not allow for the two way interaction necessary for oral culture communicators to internalize the knowledge and to change behavior. Food regulators complete compliance checklists often without a conversation with the food service worker. Expectations for the role of the regulator do not allow time for communicating food safety information in oral culture communication styles.

Oral culture communicators receive information verbally from people that they trust. The emphasis of having power over the food service worker far outweighs the perception of the regulator as educator or someone to find solutions. Oral culture communicators are concrete learners. They need repetition and they need to practice the new behavior in their environment.

Oral culture communicators requires that the process for handling food safely be broken down into doable, manageable steps with relevant examples of why they must change their behavior.

This assessment offers three recommended actions for addressing communication barriers to food safety:

- Training for the regulatory community on culturally competent communication skills. Training should emphasize skills for oral/print communication styles to ensure shared meaning when food safety information is being presented. Regulators should gain an increased awareness of communication styles by social class and increased their active listening skills to promote two-way communication (i.e. not just what do regulators think would work, but what do the operators and food service workers think would work in their context). As communicator knowledge increases, communicator competency increases.
- Review current policies to ensure support for using oral culture communication methods as a means of educating the food service community.
- Create opportunities for hands on practice to show food service workers how the preventative process makes sense in their context. Regulators should be responsible for illustrating how the preventative process will work in their context.

This policy analysis includes examining the role of the regulator as educator---imparting food safety knowledge that is helpful and practical should be emphasized as a high priority for their jobs.

- ◆ Develop among the regulatory community an understanding of the challenges that restaurants face and
- ◆ Develop among the regulated community an awareness of the challenges that regulators face to increase a climate of working together and to reduce power dynamics.

APPENDIX A - Questionnaire Data Results

1. Age:

47% = 21-29

22% = 30-39

20% = 40-49

10% = 50-59

1% = 60+

2. Gender:

42% = Male

58% = Female

3. High School Completion:

15% = Dropped out of school

85% = Did not drop out

4. Education Level and Date Achieved:

42% = GED

28% = High School Diploma

12% = Associate's degree

18% = Bachelor's degree

0% = Master's degree

0% = Doctorate

5. Current Income Level:

62% = Less than \$15,000

22% = \$15,001 - \$25,000

8% = \$25,001 - \$45,000

3% = \$45,001 - 75,000

5% = \$75,001 or more

6. Race/Ethnic Identification:

- 5% = American Indian/Alaska Native
- 1% = Asian/Pacific Islander
- 85% = White
- 7% = African American/Black - Non Hispanic
- 2% = Hispanic/Chicano/Latino
- 0% = Other

7. Were you raised mostly in a:

- 49% = Single parent home
- 51% = Two parent home

8. Parent's highest grade completed?

Mother's

- 23% = Dropped Out
- 31% = High School
- 7% = College

Father's

- 26% = Dropped Out
- 27% = High School
- 09% = College

9. Grandparent's highest grade completed?

Grandmother's

- 35% = Dropped Out
- 31% = High School
- 06% = College

Grandfather's

- 41% = Dropped Out
- 31% = High School
- 06% = College

10. How old were you when you learned to read?

- 87% = 3-6
- 13% = 7-10
- 0% = 10+

11. Which of the following describe your communication and style of relating?

Check all that apply.

- 8% = spontaneous
- 3% = linear
- 4% = focus on details
- 13% = focus on the big picture
- 11% = think before I speak
- 7% = blurt out what is on my mind
- 17% = tell stories
- 13% = comfortable with emotions
- 13% = take things personally
- 8% = focus on facts
- 11% = trust people more than something written
- 4% = focus on one idea at a time

12. What kinds of reading material were in your home as you were growing up?

Check all that apply:

- 5% = newspapers
- 29% = tabloids (like Enquirer or Star)
- 18% = fiction books
- 14% = non fiction books
- 18% = comics
- 1% = none
- 4% = other

13. When your parents needed to know something, how did they get information?

- 25% = Read
- 75% = Ask someone

14. When you need to know something, how do you find out answers?

- 32% = Read about it
- 68% = Ask someone

15. Did the language you used in your home match what was expected of you in school?

- 83% = Yes
- 17% = No

16. How well do you read?

5% = Read enough to get by
12% = Read at or below a sixth grade level
61% = Read at or below a 12th grade level
22% = Read at a college level

17. Do you have friends or relatives who do not know how to read?

25% = Yes
75% = No

18. As a child did you read often?

22% = No
52% = Some
24% = Yes
2% = Blank

19. Did your parents read to you?

45% = No
42% = Some
13% = Yes
0% = Blank

20. As a child did you know people who graduated from high school?

8% = No
28% = Some
62% = Yes
2% = Blank

21. As a child did you know people who graduated from college?

20% = No
50% = Some
30% = Yes
0% = Blank

22. In school, was there knowledge or information that "everyone" seemed to know that you didn't know?

32% = No
13% = Some
53% = Yes
2% = Blank

23. Did you have trouble with the vocabulary in school?

- 12% = No
- 26% = Some
- 60% = Yes
- 2% = Blank

24. Do you feel that your early education prepared you for your current job in food services?

- 37% = No
- 52% = Some
- 11% = Yes
- 0% = Blank

25. In which of the following areas do you feel you are different from food safety regulators? (Mark all that apply)

- 22% = Language
- 19% = Communication Style
- 19% = Social behavior
- 5% = Traditions
- 15% = Relationships with others
- 8% = Understanding of others who are different from you
- 6% = Taste in Food
- 11% = Taste in Clothing
- 8% = Taste in Sports
- 7% = Taste in Cars
- 9% = Taste in Music
- 9% = Recreation preferences
- 12% = All of the above

APPENDIX B - Oral & Print Culture Communication Styles

If you are more *Oral* Culture communicator:

- Relationships are more important than anything
- It is normal to interrupt and to have multiple conversations at once
- Telling the same stories over and over helps you in your understanding
- Sharing your personal experiences and stories is your way of connecting with others

- You are comfortable jumping from subject to subject
- You like to focus on lots of ideas at once
- It is normal to show emotions/feelings
- You are very physical and expect physical responses
- You focus on what is going on around you right now
- You focus on the big picture, not the details
- When you need information, you ask those around you
- You learn best when you get to practice the learning in your environment

If you are more *Print Culture*:

- ❖ You are most comfortable focusing on one idea at a time
- ❖ You believe a plan is essential and your goal is to stay on task
- ❖ It is important to think abstractly about situations and analyze them carefully, detail by detail and apply in multiple contexts
- ❖ You like things in order: first this, than this etc.
- ❖ You approach tasks by breaking them into parts
- ❖ You sort and categorize information
- ❖ Time is crucial and you are rigid about it
- ❖ You do not show emotions or physical affection unless you know someone really well and you do not share personal stories
- ❖ When you need information, you look for a book or article on the subject

Works Cited

Looking Out/Looking in (Wadsworth Series in Speech Communication)
Ronald B. Adler, Neil Town
Media, Tenth Edition; July, 2002

Nickel and Dimed: On (Not) Getting by in America
Barbara Ehrenreich, Arlie Hochschild, Shara Kay (Editor)
1ST OWL; April 2002

Interrupting Generational Poverty: Factors Influencing Successful Completion of the
Bachelor's Degree
Beegle, Donna
Doctoral Dissertation
Portland State University; August, 2000

Overcoming the Silence of Generational Poverty
Beegle, Donna
Talking Points October/November 2003
National Council of Teachers of English; October 2003

Grammar of Motives
Burke, Kenneth
University of California Press. 1990

A Conversation about Diversity.
Mortenson, T.
Academe, 1998, July/August). 84(4), 42-43.

Orality and Literacy: The Technologizing of the World.
Ong, W.
London: Methuen & Co., Ltd.; 1982.

Health Experts Chew on Food Borne Illness
USA Today Oct. 12, 2004

Statistical Abstract of the United States
Washington, DC
United States Department of Commerce, Bureau of the Census; 2002