

YES YOU CAN...Conduct Your Own Safety Perception Survey

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Introduction

Have you ever heard the expression, “If your safety program isn’t being measured, it’s not being managed”? Of course you have. Maybe you’ve heard the expression too often. Health and safety professionals know that one of the most important activities they carry out is the diagnosis of the health and safety management system. They know that if they do not measure they do not identify improvement opportunities and therefore cannot plan for future improvement. It follows, that the measurement methods used determine the value of the preventive information ultimately obtained. The two most commonly used measurement tools we’ve used over the last 50 years or so, has been incident statistics and program or system audits. While both methods of measurement provide improvement information, neither of them has provided us with all of the information needed to achieve world class safety. Incident statistics have provided us with limited preventive information, because they focus mainly on mistakes made in the past. Program or system audits are somewhat useful in providing information on the safety program hardware, such as compliance, inspections, investigations, etc. but they fall short of measuring the equally important softer factors such as employee satisfaction and management trust. Even combined, both methods of measurement do not identify all key factors safety professionals really need to plan to achieve world-class safety. It should be no surprise that so few companies actually achieve world class safety when the measuring instruments they’re using reveal so little about how to achieve it.

This paper describes the development and use of the safety perception survey, a safety measurement tool that has proven vitally useful in helping companies to achieve their safety improvement goals.

Measuring Employee Perceptions—Why Do It?

Most comprehensive investigations of serious events show that the incident came as no surprise to many of the company’s workers. In most instances, employees had clear prior knowledge of

the deficiency that contributed to or caused the event. Why then, do so many companies spend so little time asking employees how they perceive their work and work environment? Some companies spend more time poring over accident statistics and graphs, and reacting to accident trends, than on doing what most corporate policies say they will do—proactively involving employees in health and safety decisions.

Why do workers behave the way they do? Exhibit 1 lists some key factors that influence workplace behavior. Most of these factors are not even measured by the commonly used methods of safety measurement! If we hope to quantify these factors, and work with them, it's important to look for measurement alternatives. The safety perception survey is one of these alternatives.



Exhibit 1.

Successful, profitable organizations have learned that the way to improve their processes is to problem-solve by tapping into the collective knowledge of employees. Such organizations actively seek improvement information from their workers; it's considered simple common sense to spend time asking employees how things can be made better. Rensis Likert, a pioneer of the survey approach, used surveys to measure attitudes, perceptions, and motivation in order to help improve company productivity, quality, and service. Likert found a positive correlation between attitude and corporate profitability, growth, and return on investment.

Should you doubt the importance of this emphasis on corporate culture, consider Exhibit 2. In it are the results of a 1977-1988 study described by J. P. Kotter and J. L. Heskett in their book, *“Corporate Culture and Performance.”* The study clearly shows that companies with performance-enhancing cultures significantly outperform companies that do not have performance-enhancing cultures.

The principle applies equally well to the area of safety. Without information from employees, it is not possible to improve a corporate safety culture. Culture is a key, yet our current methods of safety measurement do nothing to assess it.

By contrast, safety perception surveys not only identify the job and organizational factors that can be reasonably well identified by audits, perception surveys also quantify organizational and human factors that audits typically do not measure. For this reason, safety perception surveys are invaluable in helping to identify the factors that influence employee safety culture and safety behavior. When we know and understand these factors, we can plan to achieve safety excellence.

The Economic and Social Costs of Low Performance Cultures		
	Average for 12 Firms with Performance Enhancing Cultures (%)	Average for 20 Firms <u>without</u> Performance Enhancing Cultures (%)
Revenue Growth	682	166
Employment Growth	282	36
Stock Price Growth	901	74
Net Income Growth	756	1

Exhibit 2.

Why Are Perception Surveys Under-utilized?

In spite of their benefits, safety perception surveys remain a little-used measurement technique in North America. Dr. Dan Petersen, one of the giants of the health and safety profession, has been quoted as saying, “I have no idea why safety perception surveys (to some companies) are such a hard sell.”

Why, indeed? Why wouldn’t every CEO want to receive unfiltered information on corporate safety issues and potential risks? Within Compass Health and Safety Ltd., we’ve found that the primary reasons that companies don’t use safety perception surveys are:

- a lack of knowledge as to how to conduct the survey properly, and/or
- a lack of resources to manage and report on the survey data

The keys to obtaining maximum returns from a safety perception survey are in fact the effective construction and administration of the survey, and the meaningful analysis of the findings. This paper summarizes a guidebook that Compass Health and Safety Ltd. recently produced to help laypeople conduct and analyze their own safety perception surveys. Our goal in disseminating this information is to ensure that the perception survey measurement approach is available to anyone who is interested in using it.

You've Got HOW Many Answers??!

Remember the old saying, “Be careful what you ask for”? It certainly applies to perception surveys. Imagine that you have 300 respondents completing a survey that contains 40 statements, each of which has five choices for the answer. That's 60,000 possible answers! To further complicate things, you'll likely want to analyze the data in a number of ways—for example, looking for specific trends by location or department. You may even want to group statements and responses into general categories, such as management involvement and commitment. How will you manage 60,000 pieces of data?

The answer is simple: you need a database. If you don't have this kind of resource to manage the data, don't even think about conducting a perception survey. We once spoke with a company that did not realize until after they had administered their survey that they couldn't manage the data they had collected. With no database to help them with analysis, they ended up with a fine stack of completed surveys but findings reports and therefore not analysis.

Off-the-Shelf Surveys—Will They Work??

As mentioned above, the first key to achieving maximum benefits from a safety perception survey is to make sure that the survey is asking the right things. In the author's opinion, there is currently no off-the-shelf survey suitable for use by all organizations; every organization has a unique profile, with special survey design needs. One company may have a fleet or employ contractors, while another does not. One company may have a flat organization, with one location and little work diversity; another may employ many workers in different positions and multiple locations. Some companies have visible senior management involvement, while others, due to factors like geography, must find other ways to involve management. Some companies have implemented behaviour-based safety and want to find out how employees think the program is working; other companies are a long way from implementing such programs. Because organizational profiles can be so diverse, survey statements that are appropriate for some companies may be completely inappropriate for others.

The survey statements used by your company need to be unique because your company is unique. Don't set yourself up for failure by administering a survey not suited to your company. One-size-fits-all surveys are a compromise, an attempt to find a common denominator that fills the needs of all companies. As a result, they often fall short of meeting the real needs of any.

The Survey Process—A Walkthrough

Exhibit 3 illustrates the safety perception survey process. Let's walk through this process and see how you can create a positive safety perception survey experience that will elicit useful prevention information from your employees.

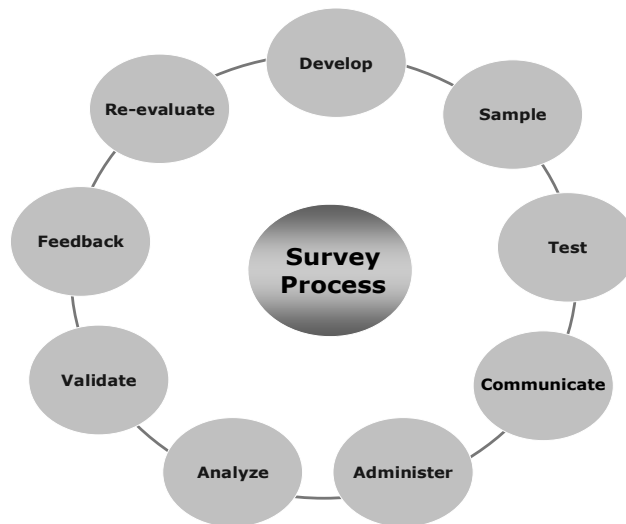


Exhibit 3.

Step 1: Developing the Survey

A poorly developed survey holds the seeds of its own destruction, so be sure to spend ample time developing yours. First, you'll need to select or develop survey questions or statements that are suitable to your organization. Drafting these statements is one of the most critical stages in the perception survey process. What do you want to know?

Be sure to word your survey statements so they can be understood by all respondents and will obtain the information you're looking for. It's imperative to frame all statements/questions clearly. Every item has to make sense to every respondent. If people don't understand what they're being asked, their responses may not reflect what they really think, causing misleading findings. There is no magic formula; survey consultants often disagree on what constitutes a properly framed statement. You have a distinct advantage over these consultants, because you know a great deal more about how your employees will respond to, or interpret specific words when they're taking the survey. Here are some suggestions for structuring statements to yield useful and credible survey information:

- limit each statement to one idea or concept
- avoid using subjective adjectives such as "good," "fair", and "bad"
- avoid using terms such as "always" and "never"
- don't frame a statement in the negative if all your other expected/desired responses are in the positive
- if there is any chance that a term will be unclear to some respondents, provide clarification
- ensure that all respondents, no matter what their position in the organization, have the knowledge or information they need to understand and respond to the statements presented
- don't use statements that "lead" the respondent

Remember, nobody can create good value out of responses to poorly worded survey statements. Take your time and develop good statements. Make sure you also include a way for employees to

comment on each question or statement. Comments are invaluable in validating survey scores. Without comments, it is difficult to know why employees responded as they did. And without knowing causes, you can't possibly be certain what actions you'll need to take to improve.

Also be sure to select an appropriate scale for your survey. Most surveyors use the Likert (1 – 5) scale, where 1 generally represents the least positive (or 0% positive) response to a statement and 5 the most positive (or 100% positive) response. There are other possible scales, and each has its advantages and disadvantages. For example, the 1 – 4 scale doesn't offer a middle scoring option for employees who are noncommittal. The 1 – 6 scale provides a wider range of scoring choices, but again, has no neutral option. Choose a scale that will give the fullest meaning to the data you get. Less than meaningful scoring will lead to poor data analysis.

Next, develop your reporting parameters. These are qualifiers (such as location and employee position) that survey respondents will choose to categorize themselves when completing the survey. Typically, the reporting parameters are placed at the front of the survey. Exhibit 4 shows a typical set of reporting parameters.

Choose your reporting parameters carefully, because they will determine the different ways that you are able to analyze the data. For example, if you don't include reporting parameters for different job positions, you will not be able to determine whether workers and managers share the same perceptions, or whether each group sees things differently. If you don't ask employees their location, you will not be able to determine whether employees in New York, Toronto, and Hong Kong all feel the same way, or if there are individual perspectives at each location. We cannot over-emphasize how absolutely critical it is to develop a comprehensive set of reporting parameters. Once the survey is completed, you cannot go back and ask questions that would allow you to analyze the data in new ways.

**Perception Survey 2007
ABC Utilities Ltd.**

Please check one box in each area:

LOCATION <input type="checkbox"/> Cucamonga <input type="checkbox"/> Timbuktu <input type="checkbox"/> Tuktoyaktuk	DIVISION <input type="checkbox"/> Administration <input type="checkbox"/> Manufacturing <input type="checkbox"/> Operations	POSITION <input type="checkbox"/> Non-supervisory <input type="checkbox"/> Supervisory <input type="checkbox"/> Management
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Exhibit 4.

To summarize, the keys to developing a good survey are to ask clear questions relevant to your organization, use a meaningful scale for the responses, include the option for employees to provide comments, and choose appropriate reporting parameters. Don't settle for a survey that fails to meet the needs of your organization.

Step 2 – Choose Sample Size

How many respondents should participate in the survey? Is it best to survey all your employees, or only a sample of them?

There are clear advantages and disadvantages to each option. Including all, or nearly all, of your employees in the survey gives everyone the opportunity to participate in the process. Employees feel more involved in the company safety program, because they've been invited to express their issues or concerns. Another advantage to including larger numbers of employees is that the survey scores become increasingly reliable (valid) as sample size increases, because the potential effects of sampling error and randomness are minimized or eliminated. Finally, the more respondents you include the more employee comments you'll have to help validate each survey statement and guide you in choosing appropriate actions. From our perspective, the more respondents involved the better. Most of our clients select this option.

However, it's not always practical to survey all employees. A corporation with 20,000 employees may not want to tackle the data-input chores that would result from surveying all employees. Not only that, the survey report would be a very thick document—perhaps with too many numbers and comments to meaningfully analyze. Clearly, in such cases, choosing a subsample of employees can be a solution. Taking a sample can result in other benefits, such as cost savings because of the reduced labour requirements to complete the surveys and input data.

It has been statistically proven that a relatively small sample size can provide accurate information. For example, in the U.S., a well-known national polling company frequently uses a sample of only about 1,000 individuals to make conclusions about the attitudes and opinions of the entire U.S. population. Studies have shown that, when properly selected, this sample size can provide a good reflection of the views of a large population.

There is no firm rule about which sample size is best for any specific company. A great deal depends on the professional and financial resources available to administer the survey, and on the company's ability to input and analyze the data.

Step 3 – Test the Survey

It's a good idea to pre-test your survey by administering it to a small group of employees. Pre-testing will help to:

- ensure that the reporting parameters are clear and correct. If respondents cannot easily and correctly identify such things as their location, position, and division, you must either modify the reporting parameters or provide clearer directions. Mistakes here could seriously compromise your options for data analysis and reporting.
- ensure that respondents will correctly interpret the survey statements. Sometimes it's impossible to predict which words or phrases will be misinterpreted. For example, you may think it's clear that the phrase "positive reinforcement" means a positive verbal encounter, but pre-testing may show that some employees interpret the phrase to mean something more tangible, like receiving a safety award. Testing allows you to ferret out such misunderstandings and clarify or re-word survey statements as needed.
- ensure that statements are not too sensitive and won't make respondents feel that their privacy is being invaded. Statements on drug and alcohol use may fall into this category. A

question that respondents may relate to a recent catastrophic event, such as a fatality, may also be too sensitive for some individuals and they may resist responding.

Administer the pre-test as though you were administering the actual survey. Afterwards, ask the respondents if the survey seemed straightforward. Then carefully review the answers to each of the statements to see if the survey is providing the information you wanted. Is there anything you want to know that your survey is not clearly telling you? Modify it as needed, and re-test with a different sample group.

No matter how tempting it may seem, do not skip the pre-test step. After a survey has been completed by all the respondents, it's far too late to correct the wording!

Step 4 – Communicate Your Intentions

Employees generally don't appreciate surprise surveys. If you want your survey to be positively received, it can be helpful to communicate your plans to all employees in advance. A memo or letter sent out for this purpose should cover the following points:

- the purpose of the survey and what you hope to achieve by administering it
- the authority under which the survey is being administered (for example, if the president has approved it, say so)
- a request for the respondents' participation
- the confidentiality protection measures you are taking to ensure anonymity
- what you will do with the results
- how you plan to communicate the findings to the respondents

Your goal is to constantly and continually communicate your progress as you work through the survey process.

Step 5 – Administer the Survey

It's time! Now that you've told employees about the survey and have shown them why their participation is important, it's time to actually administer the survey. There are several ways to do this effectively; each method has its pros and cons. Some methods, such as telephoning and mailing, are less successful for obvious reasons. Not only are you asking employees to spend their own time completing the survey, you're competing with the numerous other surveyors using these approaches.

We have had great success in getting employees to complete surveys via the internet. It's appealing for employees to be able to complete their survey at any time, from any location. However, without a doubt, our best successes with survey administration have occurred when employees are assembled in meeting rooms and asked to complete the survey anonymously on company time. You may plan to have groups of employees come to the survey room at a designated time, or simply make the task part of a regular staff/safety meeting.

If you arrange to have employees respond in a meeting, it's best to have someone other than the employees' manager or supervisor administer the survey. You may wish to recruit representatives from another plant, branch, or location for the task. Be sure to select someone that employees will feel comfortable giving their completed surveys to. No matter who you choose, all completed

surveys should go into individual, non-labelled envelopes, or into one large envelope placed at the meeting room exit. Demonstrating a respect for employee anonymity will generally reward you with truthful answers.

Step 6 – Analyze

The surveys are flooding in—what do you do with all the data? Exhibits 5 and 6 show a typical treatment of survey data. Exhibit 5 sorts the data according to the reporting parameters for the survey. Exhibit 6 contains a sample of the comments received.

Scoring Summary for June 2008 Perception Survey			Responses	Avg.	% Positive
1	In ABC Utilities Ltd., employee health and safety does not take a back seat to service.				
	Calgary				
	Administration	Non-Supervisory	20	1.4	13%
		Supervisory	6	3.7	90%
	Construction	Non-Supervisory	26	2.3	43%
		Supervisory	4	3.5	83%
	Operations	Non-Supervisory	19	3.7	90%
		Supervisory	4	3.5	83%

Exhibit 5.

Comments for June 2008 Perception Survey

1 In ABC Utilities Ltd., employee health and safety does not take a back seat to service.

Location	Division	Position	
Calgary	Administration	Non-Supervisory	The company is focused only on profit. Employees are expendable.
		Supervisory	I can't get a new chair even though I'm in constant pain. We're pushed to the limit. The company is very committed. Safety and service are great.
	Construction	Non-Supervisory	Mostly it's about the money. Too many hours of work. Short staffed. No home life.
		Supervisory	This company is still motivated mostly by profit.
	Operations	Non-Supervisory	Yes, safety first. Employee safety is a primary consideration. Very committed to safety. No service if it's not done safely. Great management in Operations. Safety is important.
		Supervisory	I live and breathe it.

Exhibit 6.

By correlating the scores with the comments, you can immediately see the benefits of including comments in a survey. Without comments, the data shows only that some groups of respondents scored high and some scored low, but gives no clue about why this occurred. Often, scores alone will not provide the direction you need to take specific action. Comments can give you that information. We strongly recommend that if you're building your own database, you include the capacity to record comments.

On the other hand, comments can sometimes reveal more than you bargained for. Under the cloak of anonymity, employees may make statements that are less than flattering. You may choose to suppress such comments in the final report, as the comments are solicited for analysis, not entertainment.

Returning to Exhibits 5 and 6, here's how you might analyze the situation at the Calgary branch of ABC Utilities Ltd.:

- the Administration, Non-Supervisory group clearly does not believe that safety is given a high priority. Some reasons are listed for this perception that ABC should look into.
- the perceptions of the Administration, Non-Supervisory and Supervisory groups appear to be disconnected. The Non-Supervisory group scores the question at 1.4, and the Supervisory group scores it at 3.7. This perception gap suggests that the two groups are not aligned in their thinking relative to this statement.
- the Construction, Non-Supervisory group scored the question at 2.3, and their comments, like those from Administration, indicate that they believe the company is running a bit too lean. Supervisors, however, generally agree with the statement, scoring it at 3.5. This difference in scores and comments indicates that there is a perception gap between the Supervisory and Non-Supervisory groups in Construction.
- there is close alignment between the Operations Supervisory and Non-Supervisory groups, which strongly suggests that in this group, safety does not take a back seat to service.

Step 7 – Validate

If you design your safety perception survey according to the approach suggested in this paper, the comments you receive will generally serve to validate the scores. However, there may be times when comments don't provide enough information on what employees feel needs to be done. In these cases, focus groups can be very helpful for getting that little bit of extra data you need.

A focus group is a small group of employees who are trusted by, and have credibility with, their fellow employees. The primary purpose of the focus group will be to review the findings, validate them if necessary (perhaps by interviews), and provide input into the action plan. The focus group might include members of the safety committee, union representatives, and/or safety coordinators. Choose group members who can communicate with each other and work together, and be sure to choose a group leader who can keep the group's discussions on target. Larger companies may find it beneficial to set up more than one focus group, each dealing with survey data specific to their location or area.

As an alternative to focus groups, you might invite employees to provide feedback through the company intranet or website. You can then use the input to further qualify some of the statements in your survey. This approach achieves the same ends as focus groups, without the cost of holding meetings. However, it requires you to provide one or more dedicated computers that employees can use to respond anonymously to focus questions. You will also need to make time available for the activity. The approach is not only cost-effective but also non-threatening, as employees can remain anonymous. Be aware, however, that if you allow employees to volunteer for this role, the ones who come forward may have an agenda other than corporate improvement. We recommend that you select the participants at random and allow them to provide further information on company time.

Step 8 – Feedback

If you administer a perception survey, employees will naturally want to know the results. Be sure to avoid overwhelming them with reams of detailed findings and comments, especially comments

that may lead to misinterpretations. Instead, provide an easy to understand summary, with a note that the full report is available on request. If employees ask to review the full report, you may want to guide them through the data. Another effective means of communicating survey results is to release a short newsletter outlining key strengths, opportunities for improvement, and action steps to be taken.

However you do it, keep all employees up-to-date on the actions the company is taking, or planning to take, in response to the survey results. And you must take action—experience has shown that conducting a safety perception survey creates a strong expectation that your company will take action on the findings. Employees take perception surveys seriously and expect to see results. Disappoint them, and you'll find it difficult to get their cooperation on future surveys or on other health and safety program initiatives.

We cannot stress this enough. Doing a perception survey without follow-up action is analogous to pulling the pin on a hand grenade without throwing it. Employees will feel disillusioned and betrayed. If you disappoint your employees this way, you'll find that some of them have exceptionally long memories and your survey results can explode in your face. Be warned: the consequences of inaction can be huge.

Step 9 – Re-evaluate

The safety perception survey yields more information about a company's health and safety management system than any other method of safety measurement/evaluation the author has ever used. It can often take a company more than a year to plan and execute all of its responses to the survey findings. For this reason, we generally don't recommend conducting perception surveys too often. Unless your company has already achieved safety excellence, the perception survey approach will likely reveal more than enough improvement opportunities to occupy your attention for some time. Most companies find it beneficial to conduct a survey once every year or two. Alternatively, large companies may choose to survey different locations or departments on a rotating schedule.

Conclusion

Now, more than ever before, employee opinions and perceptions play a key role in the success of an organization. As companies start to realize that the solutions to most of their problems are already well known to their stakeholders, more and more companies see the value in soliciting opinions and perceptions from employees, customers, and constituents. It is no exaggeration to say that management cannot lead effectively without this information.

Safety leadership is no different. Many of the factors that affect quality, productivity, and service will also affect safety. Safety perception surveys are a key tool for helping us to understand these factors—and our understanding is urgently needed. The author has worked with too many companies whose measurement systems lulled them into thinking their safety systems were fine—until a catastrophic event destroyed their happy illusion and sent management running for cover.

To make workplaces safe, management must know what is really happening inside the hearts and minds of its employees. If your current culture fosters unsafe behaviours and procedural shortcuts, you need a perception survey to find out why. If your current corporate culture influences employees to work safely even when the boss is not around, then congratulations! You have achieved one of the key prerequisites to world-class safety. A safety perception survey can help you to maintain this high level of safety.

Can you really conduct your own perception survey? Yes, you can. Based on our professional experience, we believe that by following the steps outlined in this paper, organizations can use safety perception surveys to evolve more positive safety perceptions and create more positive safety attitudes and behavior. Uncover the issues and solutions, act on your knowledge, and you too can have a world-class safety system.

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