Courage, Culture & Interpersonal Intervention

Practical, evidence-based strategies for injury prevention

By E. Scott Geller

Abstract: *This article reviews practical applications of seven interventions that target safety-related behaviors. It attempts to answer the question: What does it take for more people to become interpersonal change agents for occupational safety and health?*

FOR MORE THAN THREE DECADES, behavioral scientists have conducted field studies to develop and evaluate intervention strategies to improve safety-related behaviors in industrial, community and institutional settings (Geller, 2001b; Glenwick & Jason, 1980; Komaki, Heinzmann & Lawson, 1980; Sulzer-Azaroff & DeSantamaria, 1980). As a result, several evidence-based techniques have been identified to increase the occurrence of safe behavior and/or decrease the frequency of at-risk behavior. Most of these are interpersonal, requiring a safety leader or change agent to target a specific behavior of another person in order to decrease, increase, maintain or support that behavior. All of these cost-effective intervention strategies can be applied on a large scale for substantial injury prevention, and all have been described in the research literature, along with objective data demonstrating their potential beneficial impact.

Over the years, many of these practical intervention methods have been presented at safety conferences, and some attendees have later applied these techniques with notable success, as revealed in follow-up conference presentations. This article reviews practical applications of seven interventions that target safety-related behaviors. Before reviewing these injury prevention strategies, it is instructive to consider barriers that prevent the large-scale application and institutionalization of these procedures. In other words, given their demonstrated effectiveness and practicality, why haven't organizations and communities adopted and implemented them to help keep people safe?

Interpersonal Intervention & Courage

As with any program designed to change behavior, people could claim they lack the resources and/or time to implement an intervention. Moreover, they could doubt its effectiveness and wonder whether the time to implement the intervention is worth the effort. These excuses are irrelevant for the techniques described in this article because the techniques are straightforward and easy to accomplish with minimal effort. More importantly, the empirical research cited has demonstrated the beneficial impact of these simple interpersonal approaches to promote safety and prevent harm to people. Thus, the standard excuses for inaction cannot work in this case.

So, what is the barrier to large-scale implementation of simple-to-use interpersonal methods that clearly benefit those involved? The key word is *interpersonal.* Each intervention requires personal interaction with others and it is likely that many people lack the courage to be such a change agent. This article discusses the level of courage needed and suggests ways to develop it. In other words, the following question is considered: What does it take for more people to become interpersonal change agents for occupational safety and health?

What Is Courage?

American Heritage Dictionary defines courage as "the state or quality of mind or spirit that enables one to face danger with self-possession, confidence and resolution." This definition is consistent with a 2-page description of courage found on Wikipedia (http://en.wikipedia.org/wiki/courage), except that entry distinguishes between *physical courage*—when confronting physical pain, hardship or threat of death—and *moral courage*—in the face of possible shame, embarrassment or discouragement (see also McCain & Salter, 2004).

Leaders certainly need competence and commitment (Blanchard, Zigarmi & Zigarmi, 1985) to be effective change agents. But interpersonal intervention on behalf of safety also takes moral courage. A person could have both competence and commitment in a particular situation, yet not be courageous. Consider these

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Commitment develops from recognizing the positive consequences gained and the negative consequences avoided when applying one's competence.

two authentic safety-related incidents—the first dramatic and rare, the second temperate and common.

Responding to an Emergency

During a safety meeting, the safety director of a large construction firm was notified of a horrendous incident. The operator of an industrial equipment truck with an attached auger was pulled into the auger by the weed mesh under the mulch on which he was standing. The worker had not been standing on the safety platform provided for this task.

The safety professional immediately rushed to help the fatally injured victim. She helped the on-site nurse with the automated external defibrillator, covered the victim with a blanket and stayed at the scene until the local emergency medical service and coroner arrived.

It took courage to step up and intervene in this situation. It is likely the individual's competence as an emergency-response instructor and her commitment to safety contributed to her propensity to be courageous. But her bravery took more than these two leadership qualities. In fact, several key leaders of the company that hired the construction firm did not intervene. Rather, they stood at a distance and watched those helping the victim. One can assume these experienced bystanders had both competence and commitment for their positions, but that day they lacked moral courage.

Responding to a Risky Condition

While waiting in the lobby of a Fortune-500 company, a safety consultant noticed a bothersome at-risk behavior. A maintenance worker had climbed to the top of an 8-ft stepladder to change a lightbulb. Because the ladder was not tall enough for this job, the individual was standing with one foot on the ladder's top step. A coworker was looking up and talking to the worker on the ladder, but was not holding the ladder steady.

Imagining a serious injury from a fall to the lobby's hard marble floor, the safety consultant walked to the ladder and called up to the at-risk worker. Holding the bottom of the ladder, he asked the man to come down because "it doesn't seem safe to stand on the top of that ladder." He then asked whether a taller ladder was available.

This individual showed moral courage by interacting with this at-risk stranger in the face of potential embarrassment, public humiliation or an unpleasant confrontation. The consultant's competence and commitment as a safety trainer and scholar certainly contributed to his inclination to speak up in this situation, but competence and commitment were not sufficient for the courage he showed. In fact, this consultant's training partner, who also has extensive competence and intense commitment for safety saw the same at-risk behavior, did not act.

How Can Courage Be Encouraged?

While courage reflects a human characteristic distinct from competence and commitment, these three qualities of leadership are interdependent in some respects. Specifically, individuals with greater competence and commitment in a given situation are more likely to demonstrate courage. Thus, one's propensity to show courage under certain circumstances is increased whenever relevant competence or commitment is augmented.

Developing Competence

Behavior-focused training increases one's competence at a particular task. This involves: a) describing and demonstrating a desirable behavior or skill set; b) giving specific behavior-based feedback during a participant's role-playing of designated target behavior(s); c) practicing the desired behavior(s) with both corrective and supportive feedback; and d) implementing the new competency in real-world situations (Geller, 1996; 1998; 2001b). Subsequently, when learners have opportunities to teach the skill set to others, their perception of competence increases further, as does their personal commitment (Kouzes & Posner, 2006).

Developing Commitment

Simply put, commitment develops from recognizing the positive consequences gained and the negative consequences avoided when applying one's competence. As detailed elsewhere (Geller, 1996; 2001b; 2005; 2006; 2007), motivation or commitment to do something is determined by the intrinsic and extrinsic consequences of a task, as well as one's personal interpretation of those consequences. While many tasks are performed for expected, soon, certain and significant consequences, people often use self-talk to avoid impulsive at-risk behavior and work for long-term goals (Mischel, 2004).

Cultivating Courage

The moral courage of the safety professionals in the two earlier examples existed due to many factors, which suggests that cultivating courage is more complex and less straightforward than developing competence and commitment. For example, both individuals are extroverts. They gain energy from interacting with people, and are naturally outgoing and inclined to communicate with others.

Another personality trait that facilitated the courage of these professionals is conscientiousness (Geller, 2008; Geller & Weigand, 2005). The author knows each of these individuals well and it is obvious they each take their profession seriously both on and off the job. Beyond personality traits, certain person-states increase one's propensity to show safety-relevant courage (Geller, 1991; 1994; 1996; 2001a, b; 2003; Geller & Veazie, 2009).

The Actively Caring Person-States

The notion that beliefs, expectancies or person-states influence one's propensity to perform in certain ways is analogous to the behavior analysis concept of establishing operations (Agnew, 1998; Michael, 1982). For example, behavior therapists have shown significant behavior change in developmentally disabled and nondevelopmentally disabled children as a func-

tion of simple manipulations of the social context (Gewirtz & Baer, 1958a, b) or the temporal proximity of response-consequence contingencies (Vollmer & Iwata, 1991). Thus, the point that certain operations or environmental conditions (past or present) can influence (or establish) psychological states within humans, which in turn affects their behavior, is not new. However, this indirect and evidence-based approach to behavior change is not commonly linked to the management of safety-related behavior.

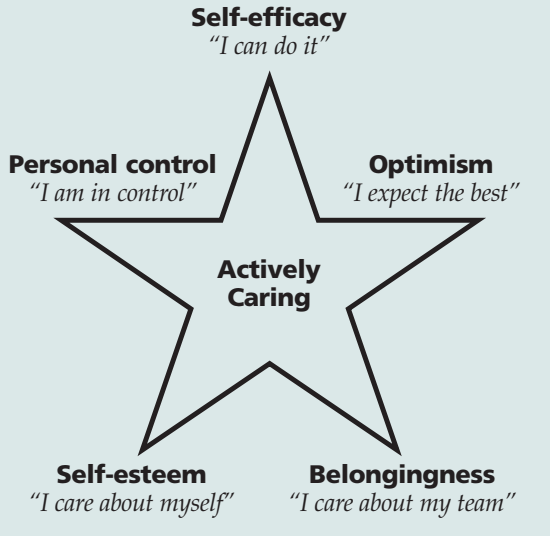
Self-Esteem

Figure 1 depicts the five person-states, which can be used to stimulate discussions about specific situations, operations or incidents that influence employees' willingness to participate actively in safety-improvement efforts. Factors consistently cited as affecting self-esteem include communication strategies, reward and penalty contingencies, and certain leadership styles. Employees have suggested various ways to build self-esteem, including: a) providing opportunities for personal learning and peer mentoring; b) increasing recognition for desirable behaviors and personal accomplishments; and c) soliciting and following up on a person's suggestions.

Figure 1

Person-States

The five person-states that influence people's propensity to actively care for the safety of others.



Belongingness

Common proposals for increasing an atmosphere of belongingness among employees have included decreasing the frequency of top-down directives and quick-fix programs, and increasing team-building discussions, group goal setting and feedback, group celebrations for both process and outcome achievements, and using self-managed (or self-directed) work teams.

Empowerment

In the management literature, empowerment typically refers to delegating authority or responsibility, or sharing decision making (Conger & Kanungo, 1988). In contrast, the psychological perspective of empowerment focuses on the reaction of the recipient to increased power or responsibility. In other words, this view of empowerment requires the personal belief, "I can make a difference," and this belief is strengthened with perceptions of personal control (Rotter, 1966), self-efficacy (Bandura, 1977; 1997) and optimism (Scheier & Carver, 1985; Seligman, 1991). Such an empowerment state is presumed to increase motivation (or effort) to make a difference or go beyond the call of duty, and there is empirical support for this intuitive hypothesis (Bandura, 1986; Barling & Beattie, 1983; Ozer & Bandura, 1990; Phares, 1976).

Employees in training sessions have suggested several ways to increase empowerment; these include: 1) setting short-term goals and tracking successive achievements; 2) offering frequent rewarding and corrective feedback for process-related activities rather than for only results or outcomes; 3) providing opportunities to set personal goals, mentor peers and chart small wins (Weick, 1984); 4) teaching employees basic behavior-change intervention strategies (e.g., behavior-based feedback and recognition procedures), and providing them time and resources to implement and evaluate these intervention programs; 5) showing employees how to graph daily records of baseline, intervention and follow-up data; and 6) posting response feedback graphs of group performance.

Culture & the Courage to Actively Care

Many factors that influence one's propensity to demonstrate actively caring courage can be subsumed under the general label *culture.* Certain cultural factors related to the development and cultivation of courage are readily influenced each day by workers. Another real-life case study not only illustrates physical courage, but also demonstrates some practical strategies for promoting the kind of moral courage needed for interpersonal intervention relevant for injury prevention.

Physical Courage to Actively Care

On Jan. 16, 2007, Dr. Kevin Brothers, executive director of Somerset Hills Learning Institute, was wheeled into St. Barnabas' Renal Surgery Center. He was in top physical and mental health, and had never before undergone surgery. He received a 3-hour surgical procedure—not for himself but for someone else. Brothers donated a kidney to his mentor and professional colleague, Dr. Patricia Krantz, executive director of the Princeton Child Development Institute.

Seven months earlier Brothers had learned Krantz was in severe kidney failure and, without a transplant, would require dialysis within a few months. Unbeknownst to Krantz, Brothers and several other colleagues agreed to donate one of their kidneys to her. Among all those tested, Brothers was the only viable match.

The difference between physical and moral courage is implicated in the three real-world events

Various interpersonal activities can enhance social support, including group celebrations, team goal setting, interpersonal coaching and collaborative work projects.

reviewed here. When a person risks social embarrassment or interpersonal confrontation for safety, s/he is showing moral courage. In contrast, when one risks physical harm to oneself when looking out for another person's health, safety or welfare, that individual is demonstrating physical courage (McCain & Salter, 2004). While the two safety professionals demonstrated moral courage, Brothers's elective surgery exemplifies physical courage.

His actively caring courage was extraordinary. Beyond several person factors, such as his self-esteem, self-efficacy, personal control, optimism and sense of belongingness, several cultural factors facilitated his display of courage. These factors are explained next as potential guidelines for promoting actively caring courage in the workplace.

A Group Commitment

Brothers's first courageous act was to pledge to give one of his kidneys to Krantz. In a conversation before his surgery, he admitted it was relatively easy to muster the courage to sign the donor pledge because the probability of being the best antigen match was seemingly low. Surely a family member would be a better match than he.

Although surprised he was the best match, Brothers affirmed strong motivation to honor his commitment. He specified the value of this two-part approach to motivate his actively caring behavior—first the promise, then the action—an approach that is applicable to the workplace.

Suppose each member of a work team were to sign a group declaration to give each other corrective feedback wherever they saw an at-risk behavior. This commitment could be called a "declaration of interdependence" (Geller, 2001b, p. 378), as it was labeled at a safety seminar for supervisors, safety leaders and maintenance personnel of Delta Airlines. The large commitment poster was signed by more than 100 Delta employees, and was prominently displayed in the maintenance workers' breakroom at the Atlanta, GA, airport.

This group obligation, given voluntarily and publicly within a supportive social context, increases people's acceptance of behavior-based feedback; it also increases the probability that a worker will deliver a coaching communication. Of course, several other safety-related behaviors could fit this two-phase process, beginning with a group commitment to actively care for each other's safety.

Group Support

Both before and after his surgery, Brothers received substantial social support for his courage. His wife, a registered nurse, and their four daughters were totally behind his decision "to move ahead to give our kidney as soon as possible." Brothers said "our" kidney "because this was a well-informed family decision made with the support of Debbie and our girls." In addition, a dedicated support group of friends and colleagues was defined by all those who pledged to donate a kidney.

Two weeks after a successful surgery, Brothers returned to work. "What an outpouring of support our family received from our school's parents and staff," says Debbie Brothers. Parents and staff of the Princeton Child Development Institute were also extremely supportive, sending thank-you cards to Brothers for helping to prolong Krantz's life and, thereby, enabling her to continue her important work.

Substantial research documents the beneficial effect of social support on human performance, from enhancing motivation to engage in a challenging task to facilitating recovery from physical illness and injury (Reif & Singer, 2000; Sarasson, Sarasson & Pierce, 1990; Sarasson, Sarasson & Gurung, 1997). This factor relates directly to the person state of belongingness, which increases one's propensity to actively care for another individual's safety or health. Thus, cultivating social support throughout a work culture is beneficial to increasing the frequency of actively caring behaviors for occupational safety.

Various interpersonal activities can enhance social support, including group celebrations, team goal setting, interpersonal coaching and collaborative work projects. Relationship-building conversations are also critical. Specific methods for cultivating and increasing social support are detailed elsewhere (Geller, 2001b; 2002; 2005; 2008).

A Trusting Culture

When Brothers honored his pledge to donate a kidney, he trusted that all those in his special donor group would follow through on their commitment were they the best antigen match. He also trusted that the staff at the medical center would provide the very best healthcare to both patients. He expected a successful kidney transplant.

The topic of interpersonal trust, including the need to distinguish between trusting an individual's ability versus his/her intentions, is addressed in other publications (Geller, 1999; 2002). There are also various ways to increase interpersonal trust in a work culture. Consider asking employees what specific events, policies or communications affect their trust levels. Then, solicit ideas for eliminating barriers to interpersonal trust and adding policies and/or procedures that could enhance people's perception that they can trust the intentions and abilities of their supervisors and coworkers. Several practical action plans will likely result from this process, but just the process of soliciting ways to affect interpersonal trust will have a positive trust-building effect.

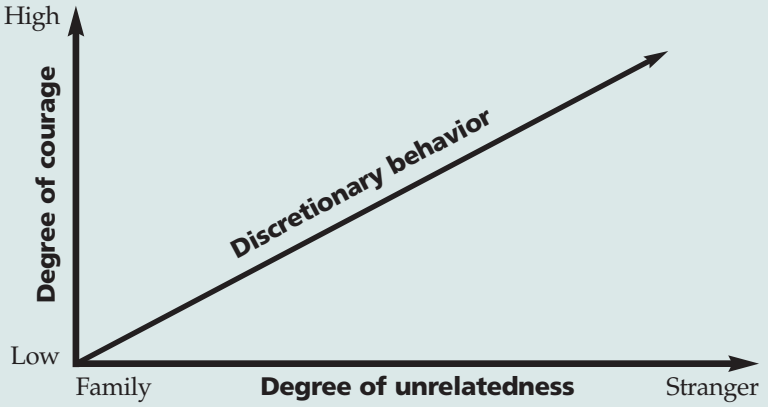
A Common Worthwhile Purpose

Brothers and his colleagues in the donor-pledge group admired and greatly appreciated the teaching and research of Dr. Krantz. She pioneered the application of behavioral science for the treatment of autism, and she mentored Brothers while he was a research intern and Ph.D. student. "Dr. Krantz gave me the opportunity to learn science, and her teachings continue to be the underpinnings of my career," he says. "Her guiding me into the field of autism treatment has given more children a chance for a better life."

Figure 2

A Family Mindset

The amount of courage needed to actively care as a function of the relationship between the observer and the potential victim.



Thus, the donor-pledge group had a common and commendable purpose. Likewise, advocates for occupational safety and health have a common and worthwhile mission—to actively care for another person's safety and health.

A Family Mindset

It certainly takes more courage to actively care for a stranger than a colleague. Attending to the safety and/or health of a family member is usually not considered courage but rather an obligation. Plus, when members of a work team think of their coworkers as family, actively caring for their safety becomes more an act of interpersonal commitment than courage. Thus, the probability of interpersonal caring is increased whenever interpersonal behavior supports a family mindset among coworkers. Figure 2 illustrates this proposed relationship between the degree of courage needed for interpersonal intervention and the degree of relatedness between the potential victim of an injury and the observer who could intervene to prevent the injury.

Many readers likely would not undergo elective surgery to give a kidney to a coworker. Fortunately, actively caring for the safety and health of one's coworkers does not require the physical courage exhibited by Brothers. In fact, coworkers do not even need physical courage—only the moral courage to face possible embarrassment, rejection or conflict when asking others to alter their behavior in order to prevent personal injury. A supportive family mindset among coworkers removes any fear of negative consequences from actively caring.

Many actions taken on behalf of another person do not require courage, merely a small inconvenience. For example, identifying or removing an environmental hazard, completing a near-hit report or making a safety suggestion involves no risk of personal injury or interpersonal confrontation, yet the benefits to people's safety and health can be dramatic.

Consider this scenario: Suppose you see a family member get behind the wheel of a vehicle and neglect to buckle up. You would not hesitate to intervene. But, what would you do if you get into a hotel shuttle van at the airport and notice that the driver and several passengers are not wearing seatbelts? Would you offer some feedback? In other words, would you have the moral courage to intervene on behalf of these at-risk strangers?

It is easy to think of excuses for not speaking up in the van. It is only a short trip to the hotel and the probability of a crash is miniscule. Besides, these people are adults, if they want to travel at-risk, it is their choice. Plus, another occupant may be offended by the feedback.

So why actively care in this situation? Here's a thought: Consider that one's moral courage sets a memorable leadership example. Such behavior could start a constructive safety conversation and plant a safety seed for others to care for occupational safety.

Contemplating one's lack of moral courage can activate some disconcerting tension between what the individual thinks s/he would do in such situations versus what the person knows s/he should do. The more one holds safety as a personal value, the greater the tension or cognitive dissonance (Festinger, 1957). However, following through with moral courage eliminates such tension and exemplifies actively caring leadership. The following evidence-based interpersonal intervention strategies are straightforward and effortless, and exemplify the kind of leadership expected of safety professionals. Question: Do you have the moral courage to apply any of these and encourage others to do the same?

The Flash-for-Life

Developed initially in 1984 (Geller, Bruff & Nimmer, 1985) and replicated in several other situations (Thyer, Geller, Williams, et al., 1987), this rather intrusive but effective intervention merely involves the change agent holding up a card to request a certain safety-related behavior (e.g., vehicle seatbelt use); if the target individual complies, the agent flips the card over to reveal the words "thank you."

In the first study (Geller, et al., 1985), the change agent was positioned in the passenger seat of a vehicle stopped in the left lane at an intersection. If the driver in the adjacent vehicle was not wearing a seatbelt, the passenger held up the flashcard so the driver could see it.

Table 1 (p. 48) depicts the impact of this intervention by specifying the percentage of vehicle drivers who buckled up after viewing the card. As shown in Table 1, seven different vehicle passengers ranging in age from 3.5 to 23 years of age flashed cards to a total

Table 1

Summary of Flash-for-Life Results

Flasher (name—age)	No. of observations	No. who looked	No. who buckled	% who looked	% who buckled
Blacksburg, VA					
Karly—3 ½	179	154	37	86.0	24.0
David—5	31	21	5	67.7	23.8
Abby—7	68	47	16	69.1	34.0
Carrie—7	64	48	9	75.0	18.8
Dane—10	56	43	6	76.8	14.0
Hollie—22	206	177	43	85.9	24.3
Tim—23	183	148	41	80.3	27.6
Total	**787**	**638**	**157**	**80.9**	**24.6**
Christiansburg, VA					
Tim—22	145	123	19	84.8	15.4
Hollie—23	155	133	16	85.8	12.0
Total	**300**	**256**	**35**	**85.3**	**13.7**

Note. *Adapted from "The 'Flash for Life': A Community Prompting Strategy for Safety-Belt Promotion," by E.S. Geller, C.D. Bruff and J.G. Nimmer, 1985,* Journal of Applied Behavior Analysis, 18, *pp. 145-159.*

of 787 unbelted drivers in Blacksburg, VA, while two of the passengers showed the card to 300 passengers in the nearby rural town of Christiansburg.

Some drivers did not turn to look at the sign, so the compliance percentages are based on only those drivers who looked at the sign. It is noteworthy that this intervention was more successful in Blacksburg (a university town) than in Christiansburg—an average of 24.6% versus 13.7% compliance, respectively. The age of the card flashers did not have a reliable impact on the driver's compliance with the buckle-up prompt.

The first applications of the Flash-for-Life intervention occurred before seatbelt use laws, when only about 20% of U.S. drivers buckled up. Twenty years later, with about 80% of U.S. drivers using seatbelts, a research team compared the impact of a positive reminder ("Please Buckle Up I Care") with a common negative reinforcement prompt ("Click It or Ticket") (Photo 1) on both behavioral compliance and body language (Cox & Geller, 2008; Farrell, Cox & Geller, 2007).

Photo 1: The front (top) and back (bottom) of the Flash-for-Life card.

Table 2 reveals the percentage of unbelted drivers who buckled up after viewing one of the two types of cards. It also shows the number of positive versus negative hand signals and facial expressions given per type of prompt. The positive "I Care" prompt was not only more effective at activating buckle-up behavior, it also elicited more positive and less negative body language than did the negative reinforcement prompt. These differences are statistically significant (all p's < .05).

The Safe-Behavior Promise Card

This nonintrusive and straightforward strategy is suitable for many circumstances and target behaviors (Geller & Lehman, 1991). It has been used effectively to increase the occurrence of specific safety-related behavior (e.g., the use of safety glasses, gloves, and vehicle seatbelts) (Streff, Kalsher & Geller, 1993), as well as to promote a generic approach to occupational safety (e.g., interdependency) (Geller, 2001b).

Based on the social influence principle of consistency (Cialdini, 2001), this change tactic merely asks target individuals to sign an individual promise card or a group pledge that declares an explicit commitment to regularly perform a particular safety-related behavior for a specified period of time (Geller, 2005). For maximum behavioral impact, the pledge-card signing should be public and voluntary.

Photo 2 depicts a generic promise card that can be used to increase a number of safety-related behaviors.

Table 2

Summary of Results From Positive vs. Negative Buckle-Up Prompting

Intervention sign	% who buckled-up	% positive hand gestures	% negative hand gestures	% positive expressions	% negative expressions
Flash for Life $n = 895$	33.6%	13.2%	0.9%	25.0%	3.9%
Click It or Ticket $n = 927$	25.6%	7.8%	2.6%	18.9%	9.2%

The Polite Lite or Road-Rage Reducer

This approach to reducing negative emotions while driving and road rage involves the use of a vehicle light to signal a simple code under relevant conditions. Specifically, one flash means "please," two flashes reflect "thank you" and three flashes are used to signal "I am sorry." Vehicle emergency lights can be used to flash the code, or a small green light (Photo 3) can be affixed to the vehicle's rear window and operated with the convenient push of a button.

In a community-wide evaluation of this intervention strategy, the polite-driving code was promoted on radio stations and billboards throughout the town of Christiansburg, VA, and Polite Lites were distributed at various workshops. Results were encouraging (Geller & Dula, 2003), but the idea fizzled and died the following year. The success of this intervention relies on marketing to get the word out, then on people to use the code. It does not take much courage to flash a polite code from inside a car, but it does require adjusting one's driving routine.

The Airline Lifesaver

When boarding an airplane, a small card (like that depicted in Photo 4) can be handed to the flight attendant. It requests that the following announcement be made after landing, "Now that you have worn a seatbelt for the safest part of your trip, the flight crew would like to remind you to buckle up during your ground transportation." The card shown was first used beginning in 1985. In 1994, the author began using an incentive card (Photo 5) that offered the flight attendants a prize if they read the announcement. Later, alternating the distribution of these two types of reminders, the author determined the impact of an incentive intervention.

A 17-year study demonstrated substantial compliance with this request (Geller, Hickman, & Pettinger, 2004), but no current airline has adopted this simple intervention. When the request was made without an incentive (i.e., prompt only), 35.5% of 798 recipients read the message; whereas, when the flight attendant was offered a prize for delivering the reminder, 53.3% of 245 recipients complied with the request.

Of course, showing that many flight attendants read the buckle-up reminder when asked to do so does not reveal behavior change clearly related to injury prevention. Indeed, it is rare to see such direct benefits of injury-prevention efforts. However, two behavior-change benefits of this approach have been documented (Geller, 2005). In one case, a passenger who heard the reminder asked the driver of the airport van to buckle up, claiming "if a flight attendant can request sealtbelt use, so can I."

As another example, one passenger wrote to say he used the backseat safety belt in a taxi because he had just heard the reminder at the end of his flight. Traveling faster than 70 mph, the taxi hydroplaned on a wet road and struck the guardrail. Serious injuries were prevented because this person had buckled up. [This letter is reproduced in Geller (2005, pp. 73-74) and Geller, et al. (2004).]

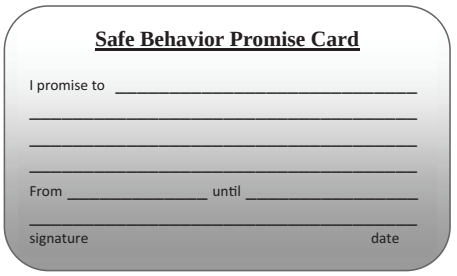


Photo 2: A safe-behavior promise card has many potential applications.

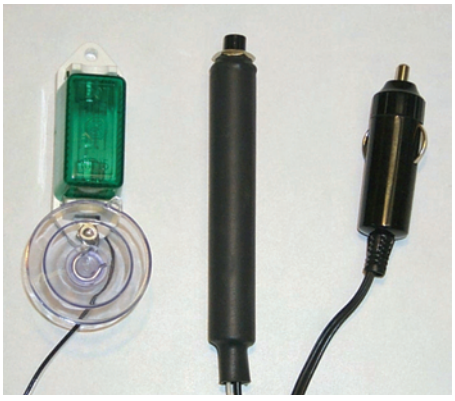


Photo 3 (above): The three components of the Polite Lite: The green light that attaches to the rear window, the push button control and the power connection that plugs into the car's power receptacle.

Driver-Training Score Card

More than 10 years ago, Geller (1996) documented an effective behavior-change intervention for driver training, which led to numerous adaptations in work settings. Specifically, the author worked with his 15-year-old daughter to develop a critical behavior checklist (CBC) for driving (Figure 3, p. 50). The CBC lists several driving-related behaviors, along with columns to record whether each behavior is safe or at-risk, and a column to write comments relevant for a follow-up feedback session.

While much research and even common sense indicate that this process works to improve safety-related behaviors, the author is unaware of a single adoption of this technique for driver education/training. However, this technique is the foun-

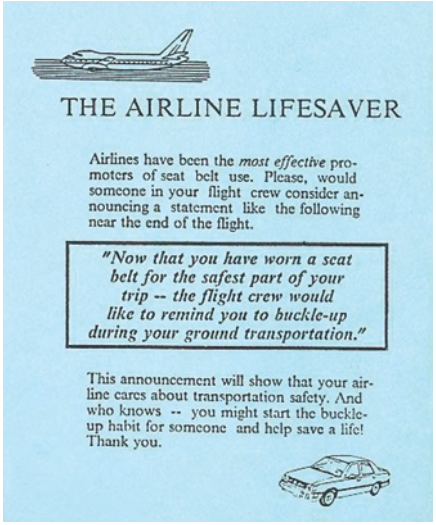


Photo 4 (left): The front of the first Airline Lifesaver Card. The back of the card included the author's name, affiliations and address.

Photo 5 (right): The back of the incentive version of the Airline Lifesaver Card. The front of the card features the same information shown in Photo 4.

Figure 3

Behavioral Checklist Used for Driver Training

Critical Behavior Checklist for Driving

Driver:	Date:		Day:
Observer 1:	Origin:		Start Time:
Observer 2:	Destination:		End Time:
Weather:			
Road Conditions:			
Behavior	**Safe**	**At-Risk**	**Comments**
Safety Belt Use:			
Turn Signal Use:			
Left turn			
Right turn			
Lane change			
Intersection Stop:			
Stop sign			
Red light			
Yellow light			
No activator			
Speed Limits:			
25 mph and under			
25 mph- 35 mph			
35 mph- 45 mph			
45mph- 55 mph			
55mph- 65 mph			
Passing:			
Lane Use:			
Following Distance (2 sec):			
Totals:			

% Safe = Total Safe Observations / Total Safe + At-Risk Obs. = _____%

dation of behavior-based safety (BBS), and much empirical support is available for the BBS approach to increasing safety-related behaviors and preventing injuries (Sulzer-Azaroff & Austin, 2000).

The Taxicab Feedback Card

It has been proposed that safety leaders record safety-related driving behaviors of cab, bus and limo drivers on a simple observation-feedback card, then after the trip, show the results to the driver for valuable behavior-based feedback (Geller, 1998). Photo 6 depicts a sample feedback card applicable in many driving situations. The top half of the card is given to the driver, while the bottom half has a return address and stamp. This enables one to track the driver behaviors observed by passengers of public-transport vehicles.

Photo 6: The behavioral feedback card is used for taxi drivers.

This technique reflects another adaptation of a basic principle and process of BBS, applied in industries worldwide with remarkable improvements in injury statistics. However, there has been no large-scale application of this process for public transportation. Certainly, it would take substantial moral courage to use this behavior-change strategy in taxis, limos and buses. But, is there a more important target for this feedback and coaching intervention?

The Actively Caring Thank-You Card

Another idea is to deliver a simple recognition or thank-you card to people following their performance of notable behavior (Geller, 1998; 2005). Such cards have been customized for particular industrial sites and educational settings. For example, the author has distributed the Virginia Tech Thank-You Card (Photo 7) for more than a decade. More than 100 students receive this card each semester, but few students have used it to acknowledge the actively caring behavior of others. Student leaders in the Virginia Tech Center for Applied Behavior Systems (CABS) have regularly used this recognition technique for two decades because this process has been institutionalized into the center's culture. However, applications beyond CABS are rare.

Conclusion

Many excuses and barriers can be offered for the lack of large-scale application of effective interpersonal interventions analogous to the seven described here. Three dimensions of human dynamics related to leadership were explained: competence, commitment and courage. It can be presumed that most safety leaders are competent and committed regarding the application of cost-effective interventions to prevent injuries. In other words, they know what to do, and are motivated to do whatever it takes to improve safety.

However, the missing link is moral courage—or the audacity to step up, take an interpersonal risk and go beyond one's predictable routine for safety. Beyond competence (or self-efficacy), four person-states that influence courage in this context were discussed (i.e., self-esteem, belongingness, personal control, optimism), and guidelines for cultivating an actively caring culture were presented. Workgroups need to entertain ways to increase these person-states among themselves and others and, thereby, enhance the courage needed to implement actively caring interpersonal intervention tactics represented by the evidence-based examples described. ■

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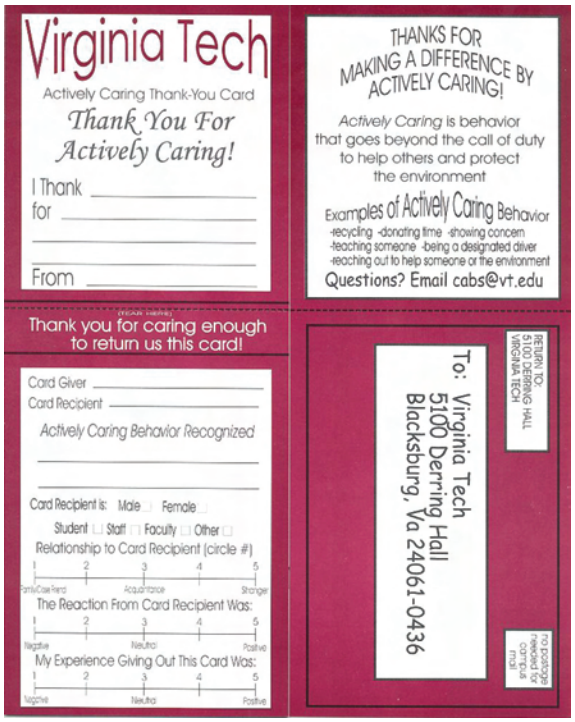

Photo 7: The bottom half of the Actively Caring Thank-You Card is detached and placed in the mail after the card giver completes the survey.

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