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The Tragic Shootings at Virginia Tech: Personal Perspectives, Prospects, and Preventive Potentials

E. Scott Geller, PhD

This discussion article reviews events and personal reactions following the mass killing at Virginia Tech that took the lives of 27 students and 5 professors, while injuring 29 more, on April 16, 2007. A positive view is attempted by exemplifying incredible campus leadership and resolve throughout the painful aftermath, as well as "reaching-out" communication revealing worldwide concern and compassion. The implementation of certain intervention strategies to increase proactive interpersonal communication for safety, security, and human welfare is advocated to prevent similar catastrophes. The author calls this intervention focus "actively caring," and discusses ways to increase the quantity and quality of this behavior, as gleaned from empirical research and industry-based applications. It is hoped that this presentation will activate relevant conversations, action plans, and research proposals.

Keywords: Virginia Tech; trauma; outreach; news media; leadership; behavior-based coaching; empowerment

I began my teaching and research career at Virginia Tech (VT) in 1969. For 38 years, I have had the pleasure and honor of sharing research-based knowledge with and receiving gratifying feedback from thousands of students. Many of these young men and women have gone on to make beneficial differences in productive careers and in the lives of countless others. We are all part of a proud "Hokie Nation," living and embracing the VT logo *Ut Prosim*—"that I may serve."

On April 16, 2007, the Hokie Nation was rocked by overwhelming tragedy—one that touched the hearts and souls of people worldwide, and changed the lives of many Hokies forever. Indeed, since that mind-boggling catastrophe I have not had a day without related and distracting cognitions. Here, I offer some personal perspectives about this horrific event and the aftermath, with a focus on heartwarming rather than heart-wrenching sentiments. But keep in mind, as VT president Charles Steger asserted the day following the tragedy, "Words are very weak symbols of our emotions."

A Gunman on Campus

I was driving to VT on April 16 to teach 600 students in my Introductory Psychology class. I was anticipating a productive day, ending with a 7:00 p.m. dinner to celebrate volunteerism throughout our campus and surrounding communities. I was thinking about my after-dinner keynote address for this event when my cell phone rang. The coordinator of our Center for Applied Behavior Systems told me, "Go home, our campus is locked down. No one can enter or leave. We've been instructed to stay away from windows because a gunman is loose on campus."

In shock and disbelief, I returned to my home office and turned on the television to national news and saw, "Two students shot and killed at Virginia Tech." Then, 5 minutes later, the news report was revised to "20 killed at Virginia Tech." Most readers know the rest of the story, because this deadliest mass shooting in modern U.S. history was headline news for a week. As you already know, 27 VT students and 5 professors were gunned down by a 23-year-old VT student.

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I stayed home on Monday, glued to the tube (so to speak) and finding myself in diverse and troubling person states—shock, vexation, confusion, anger, sadness, grief, disbelief, denial, and extreme sorrow. And all these emotions intensified on subsequent days when the media began reporting personal stories of the victims, including notable acts of heroism by some who were killed or injured. To this day, 5 months later, these cognitive and emotional states continue to invade my days and nights.

Coming Together to Heal

All classes were cancelled for Tuesday, April 17, and a special convocation was scheduled for 2:00 p.m. at Cassell Coliseum—home of the Hokie basketball team. I arrived at 1:15 p.m., only to find the 9,000-seat coliseum filled, and the overflow was lined up to enter our outdoor football stadium—home of our nationally ranked football team.

I sat in the middle of the football field, in the midst of 10,000 students, faculty, and staff, watching the large scoreboard screen. This is when I began to perceive some positive aspects of this unthinkable affliction. The campus community— the local Hokie Nation—was coming together to comfort and console each other. The university motto, *Ut Prosim*, was coming to life.

After our university president clarified the difficulty we all have in verbalizing the extreme emotions we're feeling, the Governor of Virginia spoke with passion about belongingness and the need to "not lose touch with that sense of community." Then, President Bush asserted "schools should be places of safety and sanctuary and learning." He encouraged us to reach out to one another with the affirmation "you have a compassionate and resilient community here at Virginia Tech."

A rebounding and healing Hokie Nation was evidenced after the world-renowned poet and Distinguished VT professor Dr. Nikki Giovanni delivered her rousing, almost defiant, oration. Her entire presentation appears in the sidebar.

At the conclusion of Professor Giovanni's contribution, the students inside and outside the coliseum clapped, cheered, and chanted "Let's Go Hokies." Perhaps some emotional healing had already begun.

An Emotional Vigil

Since classes were cancelled for the rest of the week, I wondered how many would attend the 8:00 p.m. vigil scheduled for Tuesday night, planned and organized by "Hokies United"—a student-run alliance of several VT organizations. I was amazed.

We are Virginia Tech
By Nikki Giovanni

We are Virginia Tech.

We are sad today, and we will be sad for quite a while. We are not moving on, we are embracing our mourning.

We are Virginia Tech.

We are strong enough to stand tall tearlessly, we are brave enough to bend to cry, and we are sad enough to know that we must laugh again.

We are Virginia Tech.

We do not understand this tragedy. We know we did nothing to deserve it, but neither does a child in Africa dying of AIDS, neither do the invisible children walking the night away to avoid being captured by the rogue army, neither does the baby elephant watching his community being devastated for ivory, neither does the Mexican child looking for fresh water, neither does the Appalachian infant killed in the middle of the night in his crib in the home his father built with his own hands being run over by a boulder because the land was destabilized. No one deserves a tragedy.

We are Virginia Tech.

The Hokie Nation embraces our own and reaches out with open heart and hands to those who offer their hearts and minds. We are strong, and brave, and innocent, and unafraid. We are better than we think and not quite what we want to be. We are alive to the imaginations and the possibilities. We will continue to invent the future through our blood and tears and through all our sadness.

We are the Hokies.

We will prevail.

We will prevail.

We will prevail.

We are Virginia Tech.

Figure 1.   The memorable and emotional candlelight vigil at Virginia Tech.

Literally thousands of students, faculty, and community residents gathered on the 40-acre Drillfield at the center of the VT campus. Each of us received a candle donated by local businesses, resulting in a sea of small "points of light" (Figure 1).

Dr. Zenobia Hikes, the VT vice president of student affairs, gave the only speech, asserting that "We will move on from this, but it will take the strength of each other to do that . . . We are a community of strength . . . We are a community of pride . . . We are a community of compassion."

Dean Hikes's moving and heartfelt words were followed by buglers playing "taps." Then the crowd stood silent for many minutes, holding their candles high. After about 30 minutes, a group of students cheered "Let's Go," and a group in the opposing half of the field yelled "Hokies." This chanting accelerated in volume until "Let's Go Hokies" could seemingly be heard for miles.

Let the Healing Begin

We were not the only community to hold a vigil on Tuesday evening. Throughout Virginia and beyond, churches, colleges, and neighborhoods held candlelight vigils to grieve for the victims at VT. Many ceremonies included bells or chimes sounding 32 times for each of the fallen Hokies. Nationwide, people showed "actively caring" sympathy for the pain our VT community was feeling. People near and far were wearing the gaudy orange and maroon VT colors. Our Atlantic Coast Conference sports rivalries melted away as universities expressed their condolences. A bridge at the University of Virginia was painted "Hoos for Hokies."

The 40-acre Drillfield at the center of our campus was filled with solemn silence. The blossoming trees had black, maroon, and orange strips of cloth tied around their trunks. With classes cancelled for the entire week, VT students and faculty gathered to reflect, mourn, and attempt to heal. Some stood in circles at the center of the Drillfield, hugging, praying, and singing hymns. Others sat on the grass to watch the scene and ponder the horrible fate of their colleagues and classmates. And, hordes of journalists and TV cameras from around the world crowded in to document the posttragedy events.

For many, the shock of the incident had worn off. Now, students, professors, and VT administrators were feeling the glare of unwanted media attention. A large neon-orange sign read "Hokie Nation Needs to Heal. Media Stay Away."

Thirty-three large Hokie stones were placed in a semicircle around the podium at the head of the Drillfield, each topped with flowers, an American flag, and a VT pennant. Each stone included the name of a victim as well as notes and memorabilia commemorating the life of the individual represented.

Yes, there was a memorial stone for the killer, although the local newspapers reported the stones numbered 32. By Friday, however, the Hokie stone for the gunman was gone, but the flowers and his name card remained. Apparently, some mourners could not accept this commemoration for the gunman—and who could blame them?

I told Dr. Jack W. Finney, the Associate Dean for our College of Science and previously the head of our Department of Psychology, that I was dedicating my next book (Geller, 2008) to the 32 fallen Hokies. His response: "We lost 33 Hokies on Monday." I was surprised and astounded by this remark. "Can you forgive this killer?" I asked. He replied, "It's not about forgiveness, but about recognizing this individual was mentally ill and his family grieves for their loss." I walked away from this conversation thinking "Our university is so fortunate to have this individual in a key leadership position."

Student Centered

With classes cancelled for the week, many students left campus. However, most faculty, staff, and graduate teaching assistants worked daily to plan for the remainder of the semester and prepare for the following week—with so many questions. How many students will return? How should grades be determined for those who return and those who do not? How can we help our colleagues, students, and staff heal? How can we help ourselves?

The administration disseminated numerous thoughtful e-mails, addressing ways to aid the healing process and detailing protocol for handling classes and assigning grades. The fundamental principle behind these administrative decisions was specified as "student centered." Faculty and graduate teaching assistants were urged to be student centered in all decisions involving students.

Actively Caring Outreach

Amidst the planning and healing that week, our campus was bombarded by actively caring voice mail, e-mail, cards, and poster displays from other universities. Thousands of people worldwide delivered thoughtful and sympathetic e-mail messages to individuals and to the university as a whole. A "condolence link" was established on the VT website, and before the week ended, more than 25,000 entries were logged, covering 81 pages.

I personally received more than 200 e-mails communicating concern and compassion for our plight. In addition to past students, colleagues, and current acquaintances, people whom I had never met personally or met only once many years ago expressed sincere condolences.

Many e-mails to our entire university community were inspirational, desiring to be on board the VT train of collective compassion. For example, the sidebar includes excerpts from a university-wide e-mail from West Virginia University—our arch sports rival for many years. This is only one representative example of extensive outreach in our time of need. Our campus was saturated with signs and posters filled with thousands of heartfelt notes from people reaching out to lament with us and help us heal.

A Fault-Finding Media

As readers are well aware, VT was besieged by the media. Throughout the first week, TV anchor persons conducted news reports from our campus: Katie Couric from CBS, Peter Jennings from ABC, Brian Williams from NBC, and Greta Van Susteren and Lou Dobbs from Fox. The clear focus of most media coverage was identifying "root causes" of the event.

Why was the campus not locked down during the 2-hour delay between the killings in the dorm and the classrooms? How was a student with a demeanor like the gunman able to reach his senior year at VT? Why was the killer treated as an outpatient from the local mental health facility? How could a person deemed at risk for hurting himself or others purchase two hand guns? How could someone walk across the center of campus in broad daylight with guns, several rounds of ammunition, and chains to lock the classroom building from the inside?

News reporters posed these and other fault-finding questions to campus administrators, police officers, and relevant faculty. Plus, they asked friends and family of the victims loaded questions such as "Are you going to return to Virginia Tech after this disastrous event?" "Are you angry with the university for their

From a Mountaineer to a Hokie
(excerpted from an e-mail received April 25, 2007, from West Virginia University)

We Mountaineers are with you, Virginia Tech . . . .

In Morgantown, the Hokie-hating capital of the world, Virginia Tech football jerseys have been hung on the concrete parking barriers at the Business and Economics Loop, banners with the "VT" logo have been laid out in our student union and hundreds of Mountaineers have gathered around Woodburn Hall—not dressed in blue and gold, but in maroon and orange . . . . Your story pulled on our heartstrings. Your pain became our pain, your city our city, and your struggle our struggle . . . not fallen Hokies, but fallen friends . . . . We saw your crying faces, Virginia Tech and we mourn with you. We mourn the empty holidays you will have to face, the weddings you will never attend, the dreams that have been vanquished.

We mourn with your administration, the members of which will spend the rest of their lives with unnecessary guilt, even though they did all they could do.

We mourn with your campus police, heroes who put their lives on the line.

We mourn with the parents . . . . We even mourn for the mother of Cho-Seung Hui, who will spend the rest of her life knowing that her son pained a nation and will forever wonder what she did wrong.

Virginia Tech, we are mourning with you—but we are also celebrating, for the heart and soul we have seen in Blacksburg gives us hope that there is goodness in the world, after all.

Do you realize what strength you have demonstrated, Virginia Tech?

Do you realize how beautifully you have banded together?

Do you realize what courage you have shown?

Do you realize the inspiration you have provided?

Watching the Hokie Nation band together this week, I wonder if we in Morgantown could have found the courage to stand in the path of a killer.

Could we have shown such strength? Could we have been so selfless and supportive of our friends? Could we have projected the same unity? Could we emulate the humanity—the goodness and the love—that emanated from our friends in Blacksburg? . . .

Hokies, in the face of such horror and such emotion, you should be proud of the way you handled yourselves this week. Your brothers in Morgantown applaud you for your strength, and we stand behind you in your recovery.

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inadequacy in preventing this incident?" Larry King from CNN asked a graduate student who got his undergraduate degree at Penn State, "Why would you select Virginia Tech after attending Penn State?"

The most despicable stunt was showing the videos the gunman had sent NBC. Instead of turning the horrid scenes to the FBI and describing the content in a news report, NBC followed the killer's wishes and made him infamous. This was a clear lack of leadership and emotional intelligence (Goleman, 1995). But, Bill O'Reilly of Fox news applauded NBC saying, "The public needs to see the face of evil."

In spite of the media "witch hunts" and VT slamming, the students' reactions were overwhelmingly positive. "Of course, I'm returning to Virginia Tech, I love this place"; "We don't blame anyone but the gunman for this terrible happening"; "We Hokies stick together, and we will prevail."

A Measure of Leadership

What does all this have to do with leadership? I say "everything." In their text on leadership, Aubrey and James Daniels (2005) claim the best way to measure the quality of leadership is to evaluate the discretionary behavior of the followers. Effective leaders inspire people to go beyond the call of duty for the organization or relevant personnel. I call this behavior *actively caring* (Geller, 1991, 1996, 2001c, 2005b) and discuss this concept later within the context of attempting to prevent the occurrence of a similar campus catastrophe. Here, I only want to point out that the unity and fierce loyalty shown by those interviewed by the fault-finding media revealed strong leadership at all levels of our university community.

The quintessence of the Hokie spirit, inspired by leaders with clarity, focus, and sensitive perceptiveness, is captured in the following excerpts from a campuswide e-mail from Dr. Lay Nam Chang, Dean of our College of Science: "Virginia Tech is still a vibrant and nurturing community . . . We are bruised but we are not daunted. Even after the reporters leave, and national and international attention turns elsewhere, we will still be here for one another, and we will remember."

The Week After

On April 23, 1 week after the VT massacre, classes resumed. The preparedness for this week evidenced

campus leadership and continued outpouring of support from the extended VT community. In fact, more than 250 mental health counselors, including several graduates of our PhD program in clinical psychology, traveled long distances to be available for our students. Every class in which the victims were enrolled had at least one counselor and staff volunteer on hand throughout the class. Three counselors were assigned to each of my large introductory psychology classes.

Was all the preparedness necessary? Would VT classes be well attended? Answer: "Yes indeed." We were all surprised to see so many students in our classes. Practically everyone returned and attended their Monday classes—another measure of campus leadership.

At 9:45 a.m., the campus held another special memorial service. Thousands gathered on the Drillfield and surrounded the semicircle of the 32 memorial Hokie stones. After a moment of silence, a white helium-filled balloon was released about every 30 seconds from one of the Hokie stones. After each balloon rose from its memorial site, a loud bell sounded. After 32 balloons were released, a galaxy of at least a thousand orange and maroon balloons was discharged. A group of students attempted to start the "Let's Go Hokies" cheer, but it fizzled out. This was not a time for celebrating the Hokie spirit.

Actively Caring Leadership

Throughout the VT ordeal, which is far from over, we all witnessed numerous examples of leadership from every dimension of our campus community. One leader's actively caring efforts enabled helpful leadership from others. Here's an example, excerpted from an April 25 e-mail to the author from Victoria Jordan Stone, academic director and primary instructor for the Blue Ridge School of Massage and Yoga.

> On Monday afternoon, April 16, Tod Whitehurst, a VT employee and a nationally certified massage therapist, was sent home from the devastated campus. He immediately got on the phone to local members of the massage community and to the Blue Ridge School of Massage and Yoga, where he is a part-time instructor. He and Valerie Beasley, a certified massage therapist, also a graduate of the school and a member of the local Red Cross, organized massage therapists to work in churches, at the

Inn at Virginia Tech, where grieving families were gathering, at the university's Cook Counseling Center, and other VT locations within 24 hours of the tragedy. Both Tod and Valerie spent long hours at VT, as well, providing nurture and stress relief to students, families, staff, faculty, emergency medical technicians, police, counselors, and clergy.

On-site massage continued at various locations on and off campus through May 10, with about 30 southwest Virginia massage therapists participating in the volunteer effort and providing housing for massage therapists from around the state and from as far away as California, Maine, and South Carolina, who had traveled to help ease the pain of the community.

Prevention Through Actively Caring

The example above of actively caring leadership reflects the kind of "reaching-out behavior" needed to help people recover from tragic events. Indeed, such acts of kindness have been essential in enabling the Hokie Nation to heal and recoup. Throughout our recovery, interpersonal and intrapersonal conversations addressed a critical question: "How can we prevent this from happening again?" In fact, this question has likely plagued everyone who heard about the massacre at VT. Why? Because if such intentional and indiscriminate multiple killings can happen on an idyllic university campus nestled on a peaceful plateau between the Blue Ridge and Alleghany Mountains, it can happen anywhere. So what can we do about such tragic bloodshed that brings us to our knees? Can we prevent such a catastrophe from happening again?

Visioning a Total Safety Culture (TSC)

There are obviously many possible answers to the critical prevention question posed above, and any proposal is easier said than done. Here, I offer my vision for a solution, based on behavior-based research, and I suggest some specific strategies. The vision of a TSC is not new. For more than two decades, my colleagues and I have used this concept to promote various "actively caring" behaviors relevant to preventing occupational injuries (e.g., Geller, 1996, 2001a, 2001b, 2001c, 2001d, 2005b; Geller & Williams, 2001) and traffic crashes (e.g., Dula & Geller, 2007; Geller, 1998b; Ludwig & Geller, 2001).

Care
Observe
Analyze
Communicate
Help

Figure 2.   The letters of COACH reflect the basic steps of effective COACHing.

In a TSC, people feel responsible for identifying and acting on safety-related objectives, including going beyond the call of duty to address unsafe conditions and behaviors. This vision has been achieved and sustained at numerous large corporations (Geller, 2001b) and could certainly be developed beyond industrial sites, even in elementary schools and on the campus of a high school, college, or university.

Organizations pursuing the TSC vision come to identify and adopt safety and security as a core value rather than a priority that shifts with situational demands. Employees are taught behavioral-science principles and procedures relevant to helping each other prevent injuries to themselves and others. In an atmosphere of mutual interdependency and interpersonal trust, employees conduct behavior-based coaching sessions on each other.

Behavior-Based Coaching

A variety of sources detail the behavioral-science education and training required to develop effective interpersonal coaching for safety and security (e.g., Geller, 2001c, 2001d, 2005b; Krause, Hidley, & Hodson, 1996; McSween, 2003), including various training materials and curricula (Geller, 1998c, 2005a). Here I only review the basic steps of behavior- based coaching as reflected in the letters of COACH (see Figure 2).

The process begins with **C**aring. This is not a "gotcha" process focused on finding faults or mistakes in other people. Rather, it is an actively caring process whereby people acknowledge and support the desirable behaviors of others and strategically point out opportunities for improvement.

"When you know I care, you will care what I know. Indeed, I care so much I'm willing to **O**bserve your behavior—with your permission of course—and offer useful behavior-based feedback." This quotation from my keynote talks on this topic reflects the critical **O**bservation phase of actively caring coaching. Sometimes, a behavioral checklist is used to look for environmental hazards and certain critical safe versus at-risk behaviors. Whether checklist-assisted or not, the objective is to **A**nalyze the interaction of behaviors and environmental conditions to identify environmental hazards, barriers to specific safe behaviors, and facilitators of at-risk behaviors. These observations and interpretations are shared with the person observed in the next step of actively caring coaching—**C**ommunication.

Performance can only improve through behavior-based feedback, and this occurs during the communication phase of coaching. The appreciation and acceptance of supportive and corrective feedback depend on appropriate delivery of the behavioral feedback. Thus, substantial communication training, including role-playing and instructor-delivered feedback, precedes implementation of the one-on-one coaching process.

If the observer and the person observed perceive the communication phase to be constructive, the last letter of COACH represents the results—**H**elp. An effective behavior-based coaching process helps people improve at a targeted task, whether the focus is on safety, production, instruction, academics, or athletics.

It is noteworthy that the coaching process benefits both the observer and the person observed. Whereas the person observed learns certain behaviors to continue and discontinue, the act of pinpointing these behaviors is instructive and motivational for the coach. While coaches hold persons observed accountable for doing their best, they are developing self-accountability to follow their own advice (Bem, 1972; Geller, 1998a, 2001b). Thus, the more people who coach effectively, the greater the self-accountability for designated behavioral objectives. When the behavioral objectives target safety and security, the process enables the achievement of a TSC. Successive approximations of a TSC are contingent on increasing the quantity and quality of actively caring coaching for the safety, security, and welfare of others.

Actively Caring Coaching for Large-Scale Safety and Security

A TSC can be cultivated through interpersonal behavior-based coaching that is both effective and large scale. Education and training, ideally through required courses in educational institutions, can certainly ensure the quality of a coaching process. But, a skill set does not guarantee effective application. Not only must people accept and trust this one-on-one intervention approach, but beneficial consequences must be apparent for both the coaches and those coached.

The intrinsic reinforcement of self-improvement can help maintain one's willingness to be coached, but extrinsic rewards will likely be needed to support the behavior of coaches. Why should people take extra time and effort to observe the safety-related behaviors of others, especially if there is no guarantee that the feedback will be appreciated? In other words, why should people actively care for a TSC?

Organizations achieving a TSC with actively caring safety coaching implement policies, training programs, accountability systems, incentive and/or reward schemes, and recognition celebrations to activate and sustain the necessary intervention behaviors (Geller, 1997, 2001c, 2002). Analogous supportive mechanisms could certainly be customized for elementary schools, high schools, and universities. But factors beyond observable behaviors, environmental contingencies, and cultural dynamics are relevant here. Some people possess intrapersonal states or expectancies that make them more likely to actively care for the safety, health, or welfare of others (Geller, 1996, 2001c, 2001d). Furthermore, certain conditions (including behavioral antecedents and consequences) can influence these psychological states and thereby enhance the probability that an individual will engage in caring-related behavior (Geller, 2001a, 2005b).

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 both developmentally disabled and non–developmentally disabled children as a function of simple manipulations of the social context (Gewirtz & Baer, 1958a, 1958b) or the temporal proximity of lunch and 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 approach to behavior change is founded on empirical research not typically consulted by behavior-based researchers or practitioners.

Self-Esteem and Belongingness

Figure 3 depicts a model I developed and have shared publicly for more than a decade to stimulate discussions among industry employees of specific situations, operations, or incidents that influence their willingness to participate actively in safety-improvement efforts. Factors consistently listed as affecting self-esteem include communication strategies, reinforcement and punishment contingencies, and leadership styles. Participants have suggested a number of ways to build self-esteem, including the following: (a) providing opportunities for personal learning and peer mentoring, (b) increasing recognition for desirable behaviors and personal accomplishments, and (c) soliciting and following up a person's suggestions.

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 the use of self-managed (or self-directed) work teams. Similar discussions among teachers and students would reveal a number of ways to build these person states throughout their culture.

In addition, it would be necessary to address ways of recognizing low self-esteem and belongingness among peers. We can presume the killer at VT suffered from extremely low self-esteem and little or no sense of belonging. For example, the VT shooter had been ridiculed and bullied throughout his pre-university schooling for his awkward use of the English language. As a result, he developed mistrust and anger toward his peers and was reportedly socially inept at VT (D. K. Pumroy, personal communication, August 3, 2007).

A more actively caring culture in elementary, middle, and high school would disallow interpersonal mocking and harassment among peers and
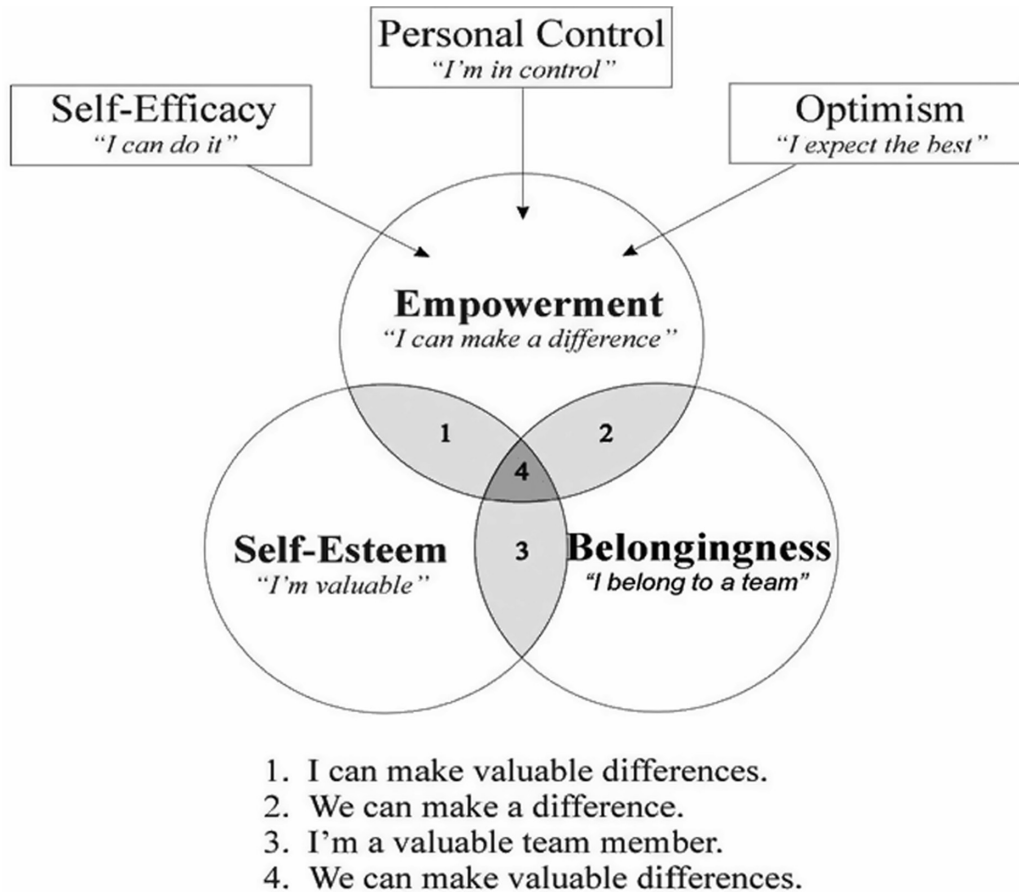
Figure 3.   Five person states presumed to influence an individual's willingness to actively care for the safety, security, and health of others.

promote actively caring coaching. If actively caring interpersonal coaching from peers could not have improved these person states of the killer, it could have at least enabled the identification of a situation in need of professional intervention. Observers are more likely to see a need and respond appropriately when they feel empowered.

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

(Scheir & 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 (e.g., Bandura, 1986; Barling & Beattie, 1983; Ozer & Bandura, 1990; Phares, 1976).

Employees who participated in my actively caring training sessions have listed a number of ways to increase empowerment, including the following: (a) setting short-term goals and tracking successive achievements; (b) offering frequent rewarding and correcting feedback for process-related activities rather than for only end results or outcomes; (c) providing opportunities to set personal goals, teach peers, and chart "small wins" (Weick, 1984); (d) 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 intervention programs; (e) showing employees how to graph daily records of

baseline, intervention, and follow-up data; and (f) posting response feedback graphs of group performance.

Again, open discussions among teachers and students could reveal conditions that influence high versus low feelings of personal empowerment. Implementing procedures to increase students' perception of empowerment as defined here will certainly improve the teaching and learning environment as well as increase some individuals' propensity to engage in actively caring coaching. The VT gunman obviously gleaned minimal empowerment from his learning experiences at our university, and in fact, his killing spree may reflect his attempt to gain self-efficacy and personal control—to feel empowered.

Research Support for the Actively Caring Model

It seems intuitive that propensity to actively care for others increases directly with the five person states depicted in Figure 3. Furthermore, common sense suggests that people with low levels of self-esteem, belongingness, and empowerment are unlikely to intervene on behalf of other people, let alone themselves. There is some relevant empirical support for these suppositions.

Geller, Roberts, and Gilmore (1996) developed a safety culture survey for industrial application, which included person factors hypothesized to influence actively caring. More specifically, this actively caring scale included adaptations from standard measures of self-esteem (Rosenberg, 1965), personal control (Nowicki & Duke, 1974), optimism (Scheier & Carver, 1985), and group cohesion (Wheeless, Wheeless, & Dickson-Markman, 1982). The survey did not include a measure of self-efficacy.

The survey also included direct measures of willingness to actively care from an environment focus ("I am willing to pick up after another employee in order to maintain good housekeeping"), a person focus ("If an employee needs assistance with a task, I am willing to help even if it causes me inconvenience"), and a behavior-change focus ("I am willing to observe the work practices of another employee in order to provide direct feedback to him/her"). Respondents' reactions to each of the 154 items of the survey were given on a 5-point Likert-type scale ranging from *highly disagree* to *highly agree*.

Analyzing safety culture survey results from three large industrial complexes showed support for the actively caring model (Geller et al., 1996; Roberts & Geller, 1995). The personal control factor was consistently most influential in predicting willingness to actively care. Belongingness scores predicted significant differences in actively caring propensity at two of three industrial sites. Self-esteem and optimism always correlated highly with each other and with reported willingness to actively care, but only one or the other predicted independent variance in propensity to actively care. The multiple regression coefficients and sample sizes were .54 ($n = 262$), .57 ($n = 307$), and .71 ($n = 207$) at the three sites, respectively.

In a field test of the actively caring model, Roberts and Geller (1995) studied relationships between workers' actively caring on the job and prior measures of their self-esteem, optimism, and group cohesion. More specifically, employees ($n = 65$) were instructed to give their coworkers special "actively caring thank-you cards" (redeemable for a beverage in the cafeteria) whenever they observed a coworker going beyond the call of duty (i.e., actively caring) for another person's safety. Those employees who gave or received thank-you cards scored significantly higher on measures of self-esteem and group cohesion than those who did not give or receive an actively caring thank-you card.

In an unpublished study, five of my students asked individuals ($n = 156$) who had just donated blood at a campus location to complete a 60-item survey that measured each of the 5 person factors depicted in Figure 3. The high return rate of 92% was consistent with an actively caring profile, but most remarkable was that this group scored significantly higher ($p < .001$) on each of the five subscales than did a random group of students ($n = 292$) from the same university population (Buermeyer, Rasmussen, Roberts, Martin, & Gershenoff, 1994).

In a more recent test of the actively caring model, Allen and Ferrand (1999) gave college students a survey that assessed their levels of self-esteem, belonging, and personal control, as well as their dispositional levels of actively caring (as assessed with a measure of sympathy for others). The author's measure of actively caring mediated the observed relation between personal control and self-report of various environmentally friendly behaviors. In other words, participants scoring higher on actively caring and personal control were more likely to report going beyond the call of duty to protect the environment.

Concluding Commentary

Soon after the April 16 tragedy at VT, I received a very special gift from Kathleen A. Brehony, my first PhD graduate of our clinical psychology program. She sent me 36 copies of her 269-page book *After the Darkest Hour: How Suffering Begins the Journey to Wisdom* (Brehony, 2000). Realizing immediately the posttrauma recuperative potential of this provocative and illuminating scholarship, I distributed 35 copies to friends, colleagues, and students who were struggling as I was with the aftermath of the VT catastrophe. All who read this book claim it revealed transformative power in suffering and helped them derive courage and wisdom from the VT tragedy. The following excerpt from Dr. Brehony's book seems particularly relevant:

> The unearthing of the gold of the Self in the lead of the ego is the gift of suffering. But this savage journey requires leaving what we know behind and becoming open, and truly vulnerable, to the truth about living a human life. We must hear the pain, endure the excruciating moments that declare with their arrival: "Life will never be the same." It's the price we pay for new consciousness, and the birth of the authentic Self can only be won through the refiner's fire. Because in spite of the promised benefits, the powerful ego usually resists. Most of us refuse to wake up, to let go of who we thought we were. We don't like to feel bad in this culture and so we grasp at straws, reaching for anything that will forestall the journey or offer the promise of a painless passage. Easy answers are offered by a wide variety of persuasive snake-oil salesmen, but none are true. The only way out is through (Brehony, 2000, p. 78).

Kathleen Brehony not only explicates how we often accentuate the pain of human suffering but, more importantly, offers practical advice, strategies, and exercises to help us overcome the consequences of disaster with augmented appreciation of personal blessings, enlightened compassion to reach out to one another with a valuing spirit, and renewed optimism that our most challenging obstacles can be eliminated. Moreover, for me, this book bolstered my resolve to continue developing large-scale intervention techniques to promote an interdependent mindset in our culture and increase the occurrence of actively caring behaviors.

Fifteen years ago, helping others was popularized by the slogan "practice random acts of kindness" (Editors of Conari Press, 1993). Today, advertisers create and disseminate similar campaigns, along with relevant modeling. Specifically, Liberty Mutual asks us to "be responsible" by reaching out to help others, and the Hilton Hotel chain advocates "hospitable acts" between people. Whatever it is called, we need more of it.

We need more people to be more vigilant of current needs of others and then to do something to reduce that need. I propose that we can make this happen indirectly by increasing people's self-esteem, self-efficacy, personal control, optimism, and/or sense of belongingness. Here, I have offered some practical ways to improve these person states, as gleaned from discussions at industrial sites.

Although the connection between the five person states and actively caring behavior is evidence based, more research in this domain is required. In addition, empirical evaluations of strategies to benefit these person states in various circumstances and under certain environmental contingencies are called for. However, we also need behavior-focused studies on ways to directly increase people's actively caring for the safety, security, and welfare of others. Will education and training be sufficient, or will it be necessary to add extrinsic incentive and reward contingencies? What kinds of institutional policy, if any, can increase the quantity and/or quality of actively caring? To what extent will individual differences (e.g., age, gender, learning histories, and personality traits and states) of the helper and victim moderate the impact of interventions designed to increase actively caring? How will the situation (e.g., safety-related vs. security-related, environment-focused vs. individual-focused, behavior-deficit vs. attitude-deficit situations) influence the quantity and/or quality of actively caring?

These are only a few of the empirical questions worth addressing in the critically important domain of encouraging more selfless interpersonal helping behavior. Reacting to mishaps by searching for "root causes," punishing perpetrators, and stepping up enforcement procedures are obviously insufficient. The prevention of sudden misfortunes like the VT tragedy requires more proactive vigilance and actively caring among people. Yes, this is much easier said than done. It is hoped that this and other articles in this special issue of *Traumatology* will stimulate relevant conversations, visions, behavioral goals, action plans, and research proposals.

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