

## Decision-making

# The Impact of Social Media on Decision-Making: The Millennial Generation's Persistent Weak Layer

Story by Jerry Isaak

Every winter begins with a clean sheet; it is one of my favorite aspects of the season. The first snow falls, not on top of last year's snowpack, but as the first layer of a new base. The old problems are gone, new challenges lay ahead.

However, during the past several winters I have become increasingly concerned with a persistent weak layer that has continued to develop despite the disappearance of the snowpack. When the snow returns, this persistent weak layer is still there, growing exponentially more complex and powerful every year. Though this problem impacts many avalanche professionals and virtually all of our students, it is rarely acknowledged or addressed.

This persistent weak layer is not within the snowpack, but within the multitude of human factors, heuristic traps, and cognitive biases that affect our decision-making. The persistent weak layer that I have seen return, always stronger, season after season, is the influence of social media upon the millennial generation (those born between 1982 and 2002) and their younger peers.

As a university-based outdoor educator and avalanche instructor I have witnessed the incredible growth and pervasive impact of online communities on my students. Humans in general and young people in particular have always engaged in self-branding. What social media has changed is our ability to control the presentation of self. The connectivity to our peers (the "audience" to our presentation of self) has, with the advent of smart phones and social networking websites and/or apps, become nearly constant. The development of these new forums, combined with the proliferation of technology, such as helmet cams and GPS-enabled tracking tools, appears to require a shift in the way avalanche educators approach the instruction of the topics of risk management and decision-making.

### Social Media and the Millennial Generation

The students in my university have grown up with the Internet. They likely had their first email address in elementary school and their first mobile phone before they could drive. They can compose and send a text faster than I can open my "flip" cell phone. This year's college freshmen were nine years old when the first GoPro helmet camera was sold in 2004, the same year as the founding of Facebook.

In the past decade social media has caused a fundamental shift in the way that people interact. Because of their fluency with the digital tools used to access social media, many among the millennial generation have been at the forefront of this social shift. Today, Facebook has 1.15 billion users worldwide, with 48% of users aged 18-34 checking their account when they wake up, and 28% of 18- to 34-year olds checking their account before they even get out of bed. Approximately 90% of American undergraduate students have a Facebook account and average 60-120 minutes a day on the site.

You might wonder, who cares? You may not use social media or even own a computer. If you are like me, your best days are spent sliding on snow in the backcountry, not punching keys in front of a blinking screen. However, even if you don't care about social media or own a computer, statistics show that it is a virtual guarantee that the students in your avalanche class or employees on your ski patrol do. The people you are mentoring and teaching decision-making to are almost certainly influenced by social media. And, like a persistent weak layer, this problem isn't going away soon.

### Heuristic Traps

In 2004 Ian McCammon published two articles in *The Avalanche Review* (TAR 22-2 and TAR 22-3),

based on findings presented at the 2002 ISSW in Penticton, BC. He identified six heuristic "traps" that correlated with victims' behavior in a study of 715 recreational avalanche accidents that took place in the United States between 1972 and 2003. Heuristics refer to rule-of-thumb problem-solving strategies. Because the heuristics studied by McCammon take place at a mostly unconscious level, they can have a subtle but powerful effect on decision-making. This study and the related articles have had a significant impact on avalanche education and on media coverage of avalanche accidents. With the study, McCammon brought the science of heuristic decision-making into the vernacular of the avalanche community, and he highlighted six of the most prominent heuristics that applied to avalanche accidents. The six heuristic traps are: familiarity, acceptance, consistency, the expert halo, scarcity (tracks), and social facilitation (aka FACETS).

Most TAR readers are likely to have encountered at least a brief discussion of heuristic traps on an avalanche course during the past decade. Many of us make this topic a significant component of the curriculum on our courses. However, as a result of social media, I think it is time to take a closer look at the way that we introduce heuristic decision-making in avalanche education.

### Social Media: a Potent Heuristic Trap

Acceptance and social facilitation are two heuristic traps that relate directly to the way social media might influence decision-making. These are not the only ways that social media could influence decision-making, but they are two that may already be familiar to avalanche professionals.

McCammon defined the acceptance heuristic trap as "the tendency to engage in activities that we think will get us noticed or accepted by people we like or respect, or by people we want to like or respect us." In his study this heuristic was evaluated as a gender acceptance heuristic, under the premise that "under certain circumstances, men in the presence of female peers will behave more competitively, aggressively, or engage in riskier behaviors." When I introduced this concept in a university-based introductory avalanche class, all the males nodded in enthusiastic understanding of this phenomenon.

Although the acceptance heuristic may be especially pronounced with reference to gender, it seems to apply more broadly as well. An example of this broader application is found in the comments of one of my students when he said, "I'm not going to post something lame [on Facebook or YouTube]. I'm going to post the raddest thing I did all day, and then my buddy is going to try to top that, if he can." This student freely admitted that he was attempting to get noticed by others (male and female) through what he posted online. He also acknowledged that he would sometimes attempt more difficult or hazardous tricks if he knew that the camera was rolling.

Engaging in risky behavior so that others will notice us is not a new concept that has only emerged with this generation. What is new, however, is the nearly constant "virtual presence" of the others who we are trying to impress. This constant virtual presence is especially relevant to the social-facilitation heuristic.

According to McCammon, the social-facilitation heuristic is a "decisional heuristic where the presence of other people enhances or attenuates risk-taking by a subject, depending on the subject's confidence in their risk-taking skills." His study found that parties who had met others on the day of their accident had much-higher exposure levels than parties who met no one. Interestingly, the social facilitation heuristic "appears to require only

that other people be present or be nearby" (emphasis mine). The phrase, "be nearby," describes, in 2003, a physically near presence. Now, in 2013, with the development of social media and related technology, "other people...nearby" has been simultaneously expanded to a potentially worldwide audience and shrunk to the size and portability of a smartphone. The impact of this development is hard to overstate. A recent *WIRED* magazine article states that millennials "make no distinction between the real and the virtual. Actions that begin in one realm play out in the other. They are interwoven."

What I have observed with my students is that the social-facilitation heuristic trap is now clearly in effect even when others are not physically present, but when they are connected through a social network or technological link.

### Correlation and Causation: Risk Glorification in the (Social) Media

The effect of heuristic traps is challenging to research and, even in McCammon's seminal study, is primarily referred to as having a correlating influence. Essentially, heuristics are said to be a contributing factor rather than a cause of avalanche accidents. This makes intuitive sense; avalanche accidents and their causes are very complex. So, beyond correlative heuristics, what evidence shows that social media influences decision-making in avalanche terrain?

There is a large volume of research on social media but, perhaps unsurprisingly, nothing on how social media influences decision-making in avalanche terrain. However, there are several studies on the effects of different types of media (risk glorifying or pro-social) on behavior, emotion, and thought processes. One of the studies most closely related to our field is a recent meta-analysis of the effects of risk glorifying (traditional) media exposure on risk-positive emotions, cognitions, and behaviors.

In this study, traditional media was represented by video games, videos, and photographs. A summary of the main findings indicated that:

1. Risky media contents do indeed have causal force.
2. According to the meta-analysis, active participation in risk-glorifying media interfaces has a larger effect than passive consumption.
3. Psychological processes include the priming of risk-related constructs, effects of risk-positive situational heuristic cues, perceived social norms, personal risk habituation, and changes in the recipient's self-concept.

In other words, our media consumption directly impacts our emotions, thoughts, and risk-related decision-making.

It is hardly surprising to discover that media influences us. Billions of dollars are spent every year on advertising because it works. The significance of these findings for the field of avalanche education lies in connecting the dots to the potential influence of social media upon our risk-related behavior. While traditional media and advertising may have a powerful impact on our behavior, the impact of social media is potentially much greater – especially when you consider that only 14% of people trust traditional advertising, while 90% say they trust recommendations made on social media.

### Addressing the Persistent Weak Layer

The reach of social media has expanded so rapidly that today's avalanche students are no longer the demographic our educational system was designed to teach. The influence of social media and related technology on the decision-making processes of individuals and groups in avalanche terrain will likely grow and evolve. This

continued development appears to require a shift in the way avalanche educators approach the instruction of the topics of risk management and decision-making.

I recently gave a presentation on this topic at the Wilderness Risk Management Conference (Jackson, WY, October 1-3, 2013). The discussion following my presentation raised several points that I hadn't considered. One colleague remarked that, due to the high quality of sharable media (for example HD first-person POV), the perception of "experience" has shifted. He suggested that consumers of this high-quality media might feel as though they had "experienced" the activity, even though they were in fact passive viewers. This effect might then lead to overconfidence in similar terrain or during similar activities, because the individual felt that they were more "experienced" after engaging with related sharable "adventure media."

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Another colleague commented that the production of social media might encourage participants to reflect more deeply on their experiences. The crafting of a sharable narrative could cause participants to repeatedly review their actions in a way that, prior to modern technology, was previously impossible. This positive effect is worthy of further study and experimentation, but I wonder if authentic reflection is the mark of an experienced practitioner and out of reach for novices.

Although I have experimented with a few ideas of how I might shift my instruction to respond to social media's influence, I'm still not entirely sure what to do. What I do know is that this persistent weak layer is here to stay. I also know that TAR readers are a highly opinionated, highly experienced group of professionals who have incredible collective insight. I would like to hear what you think is the best way to respond to the influence of social media. Am I blowing it all out of proportion, or do you face similar challenges in your own practice?

Send me an email, text, tweet, or post on my Facebook wall to let me know what you think. Or, better yet, send your response to *The Avalanche Review* so we can all participate in a conversation about the challenge of avalanche education and decision-making in the age of social media.

Jerry Isaak is an outdoor educator and avalanche instructor at Eastern Oregon University. He also serves on the board of directors for the Wallowa Avalanche Center (Joseph, OR). His favorite days are spent with friends (real friends, not just on Facebook), sliding on snow high in remote mountain wilderness. You can contact him at [gisaak@eou.edu](mailto:gisaak@eou.edu).



## Two Sides of Social Media

Story by Bruce Tremper

The avalanche forecasters who work for me at the Utah Avalanche Center have grown weary of my constant refrain: "Avalanche forecasting is the easy part of the job." Thirty years ago when I first started this crazy career, I was naive enough to believe that if we just provided critical avalanche information to the public, they would automatically come to the correct conclusions and make the right decisions. But, of course, I was very wrong. Since then, the forecasters who worked for me became weary of my constant refrain: "We're in the entertainment business," which often alternated with Dale Atkins's refrain: "We don't have a forecasting problem, we have a marketing problem."

If that's not enough, we have found in recent years that entertainment and marketing have jumped mediums. The old ways of doing business – telephones, email, television, radio, and newspapers – have become increasingly irrelevant, especially to the younger, at-risk demographic. Several years ago, I noticed that if I sent an email to any of my nieces, nephews, or my friend's kids, a month would go by before I would get a text: "noticed your email. WTF dude why didnt you text me?" Texting and social media is simply the way most communication occurs.

But there are two sides to the new communication media. In the October issue of *WIRED* magazine, an article by Ben Austin presented an excellent account of the recent, dramatic escalation of gang violence in Chicago's South Side because of the use of social media among gang members. Gangbangers routinely post their latest murders – sometimes graphically – on Facebook, Twitter, YouTube and Instagram along with their other exploits and photos of them posing with their stash of guns.

"Increasingly disagreements that end in bloodshed have their origins online," Austin writes. "The Chicago police department, which now patrols social media along with the streets, estimates that an astonishing 80 percent of all school disturbances result from online exchanges... Videos from ChiTownBangn and Gang Bang City Ent. look like the thug-life version of *Girls Gone Wild*, the cameras inspiring kids to act out vicious caricatures of themselves. WorldStarHipHop.com had become a clearinghouse for amateur fight videos, with guys often shouting 'Worldstar!' as they record themselves administering beatings or film someone else being pummeled; the site even puts together best-of-the-week fight compilations."

If any of this sounds familiar it's because we have all noticed that a tamer version regularly occurs on TGR or *SnoWest* forums, blogs, Facebook, Twitter, and Instagram as the cutting edge of skiers, boarders, and snowmobilers post their exploits in increasingly unforgiving terrain, triggering avalanches, rescues, and whatever other manifestations of the extreme sport de jour.

As I watch the craziness escalate, it looks to me like a long train left the station with faulty brakes and is headed down a long, steep, and winding grade. The mountains have become no country for old avalanche forecasters.

But alas, new communication media can work both ways. In the neighborhoods of Chicago's South Side, police quickly learned to closely monitor critical websites and social media in an attempt to keep one step ahead of escalating violence. They deploy their personnel where needed according to their intel, and they even respond to online posts with posts of their own, such as: "I see you got a new gun. Where's it at?" They also have responded with a Chicago-wide program called BAM (short for Becoming a Man), aimed at 1500 troubled high school freshmen and sophomores, that teaches them how to avoid conflict and how to use anger management and risk management.

Again, if any of this sounds familiar it's because we use the same tactics in the never-ending battle for the hearts and minds of at-risk populations of potential avalanche victims. Pioneered by Craig Gordon, the *Know Before You Go* avalanche education for Utah youth has been phenomenally successful, and the program has been exported throughout the US as well as internationally. Similarly, several years ago, old-dog forecasters like me had to take a crash course in social media. We regularly use Facebook, Twitter, and Instagram to not only broadcast the avalanche message, but use them for two-way communication as well. Most of our best information on avalanche activity comes from crowdsourcing and monitoring the various social media sites.

We also struggle to stay abreast of changing social media trends. Several years ago we started with Facebook, then the next year expanded to Twitter and texting. This year we will jump into Instagram. Twitter has been a perfect medium for breaking news and monitoring activity from others through hash tags. (In our office and at home, we regularly monitor TweetDeck.) Finally, Instagram seems like the perfect avalanche communication tool with both visuals and captions, and it can also automatically update the other social media as well. We have also noticed (as current research shows as well) that younger audiences have largely abandoned Facebook in favor of Twitter and especially Instagram. Best of all, we use all these for two-way communication: we get our message out, and a small army of volunteer observers lets us know what's going on – usually with photos or videos attached.

Next year? I suspect we will have to learn yet another Next Big Thing.

No mug shot from Bruce Tremper as he is usually behind the camera. You can reach him @uac\_bruce.

