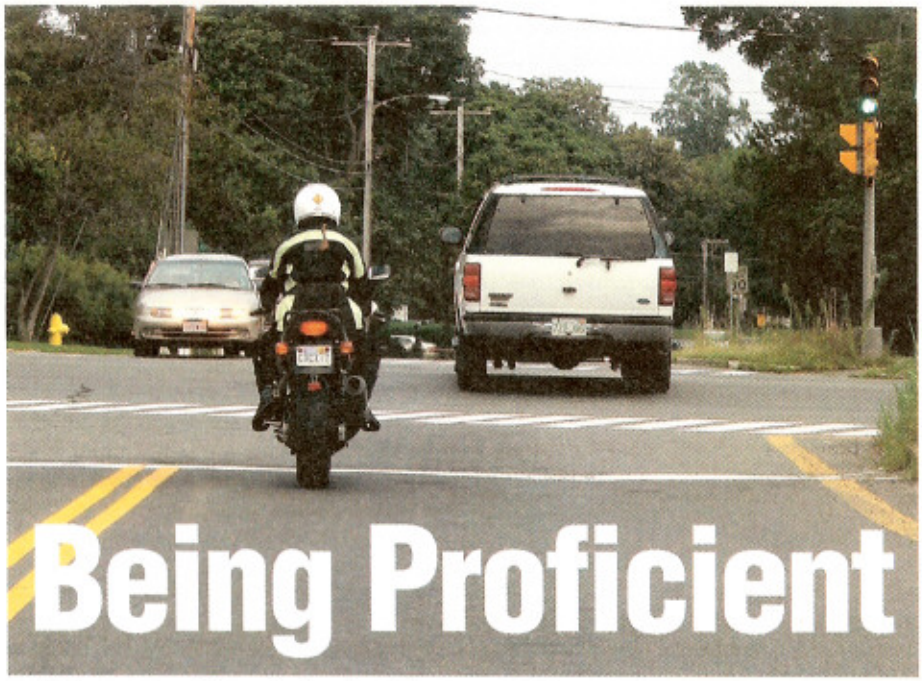

Being Proficient

Proficient motorcyclists who develop their mental skills minimize the risks of riding.

by Ken Condon

As another season begins, I thought it would be worth revisiting a basic question, "What is a proficient motorcyclist?" Young riders might define a proficient motorcyclist as someone who displays impressive speed on the racetrack or in the canyons or someone who can do a long wheelie. Older riders might define a proficient rider as someone who can maneuver an 800-lb. motorcycle within tight confines.

I think we can all agree that a rider who can carve a corner with precision, balance a motorcycle on its rear wheel for extended periods or maneuver a large touring bike in tight spaces deserves to be recognized for his or her abilities. But, when it comes to describing a proficient motorcyclist, we must also include the ability to make it safely home every day without drama.

Proficient riders possess many of the same attributes as the road racer, stunt rider and parking lot magician who knows the intricacies of cornering and balance. But what makes them stand apart is their understanding that excellent physical skills like braking, swerving and cornering cannot prevent a crash. They take responsibility for their own safety by developing their mental skills to minimize risk.

How Skilled?

Let's say you have been riding a motorcycle for many years. You've taken both the MSF Basic RiderCourse and the Experienced RiderCourse, and you head to a parking lot every few weeks to practice emergency braking and swerving. Even though your physical riding skills are well-developed, you experience a lot of close calls when riding in traffic. Too many riders will blame "those lousy drivers" for moments like these, not realizing that proficient riders rarely experience close calls. If close calls are part of your everyday experience, you must recognize that your *mental* skill set is not fully developed.

Managing traffic is challenging, but so is riding on curvy roads. If you often feel tense when cornering, are unsure of how much traction you have and lack the confidence to lean your motorcycle as much as you need to at the pace you want to ride, you might think that taking your cornering skills a step further by attending track days would lead to a higher level of confidence in your ability to handle anything the public roads and traffic can dish out. But if you did, and panic still surfaces when cornering on twisty roads, and if you still feel anxious when riding in traffic even when there is no obvious danger, then there is clearly something still going on that needs to be addressed.

It's likely that you have neglected to develop the mental skills that allow you to interact safely with other road users and to manage the complexities typical of the street riding environment. It's human nature to focus energy on the tangible, whether that is the ability to lean deeply into corners, to maneuver at very slow speeds, or to perform stunts. But doing this at the expense of critical mental skills leads to a dangerous imbalance in riding skills.

This type of imbalance is similar to an amateur bodybuilder who focuses too much energy on a few muscle groups while ignoring other muscles that are important to maintain good balance and health. The result is a body with poor posture and underlying structural problems. A knowledgeable bodybuilder or motorcyclist knows not to ignore the less obvious parts that are important to becoming a well-rounded athlete or rider. Keep those physical skills sharp, but do not neglect the mental skills that are most important for keeping you safe.

The best riders rarely ever need to use their finely honed physical skills to save them from a crash. That's because they have learned strategies that minimize, or dare I say eliminate, the need for heroic action.

These riders learn to predict what other drivers are about to do. They can also spot hazards early, accurately evaluate their significance and act appropriately to minimize the likelihood of a crash. Oftentimes a street riding crash is the result of a sequence of factors that fall into place like toppling dominoes. The best riders with the strongest mental skills can detect the often-subtle clues that begin the sequence and act quickly to halt the progression.

Play the Game

Proficient riders have excellent cognitive skills that allow them to evaluate the traffic or roadway and quickly identify when something is amiss. This skill must be developed and refined. One way to develop these skills is to play an imaginary video game where your objective is to scan the roadway, identify possible hazards and predict the actions of the other players who may be out to get you. You accumulate points for acting in a way that keeps you safe.

For instance, you approach an intersection with a car in the opposite lane that is waiting to turn left across your path. You get 30 points for being visible, by choosing a lane position that allows the driver to easily see you rather than being hidden by tailgating the car ahead of you; you get another 10 points for decelerating, just in case; 10 more points for covering your brakes early and 20 points for recognizing subtle signs that indicate that the driver does not see you and is about to turn. You get 50 points for applying your brakes hard without skidding and for stopping in time. You quickly check your mirrors to see if there is a possi-

Some riders put a lot of energy into riding fast but neglect to think about the risks.

bility of being rear-ended, which gives you another 20 points. Notice that the mental skills netted you the most points (a total of 90), whereas the physical skill of braking accounts for 50 points. Of course, if your physical skills had failed and you either collided with the car or skidded and fell, then you would have lost the game. However, excellent mental skills would have likely afforded you the luxury of more time and space to stop so that less-than-stellar braking skills may have been adequate.

Not all hazardous encounters involve traffic. The scenario may be a road surface hazard, a pedestrian, or a blind corner with an unexpected mid-corner surprise. In the case of the blind corner, you get points for slowing to a conservative entry speed and choosing a wide entrance and cornering line that gives the best angle of view and uses the least amount of traction. More points are given if you countersteer confidently and roll on the throttle gradually as soon as you tip into the curve. Your mental skills prepare you for the corner and reward you with a margin of safety, while your ability to initiate lean and roll on the throttle early and precisely gains you maximum control.

Time And Space

Still not convinced that your superior physical skills may not be enough to keep you safe? Then consider the timing and circumstances of a typical 30 mph crash. At that speed you are traveling at 44' per second *(1 mph = 1.47 ft/sec)*. Getting a motorcycle stopped from 30 mph takes just over two seconds and requires about 35' of space. But braking distances include more than just the time and space to physically stop your motorcycle. It also includes "thinking time" and "reaction time." At 30 mph you can count on using about .7 seconds or 31' to realize that there is a problem. It then takes you another .3 seconds or 13' to react by rolling off the throttle and reaching for the brakes. That means you traveled 44' before even touching the brakes. Finally, it takes you about 2.2 seconds or 35' (with a typical deceleration rate achieved by the average rider) to bring the motorcycle to a halt. Add this "braking time" to the "thinking time" and "reaction time" and you'll need a total of 3.2 seconds and 79' in which to stop.

Let's say you are traveling at 30 mph and a car pulls out from a side street. It takes one second for you to perceive that action is required and for you to react. You execute a perfect, quick stop, but did you have enough time and space to avoid a collision? The car would have to be at least 80' away (about three and a half seconds) when you noticed it as a threat. Unfortunately, it is likely that you will have only two seconds from the time the driver begins to move until impact. This is an impossibly short amount of time to complete the thinking and braking sequence. Your braking skills would have slowed you significantly, but not enough to prevent a collision.

Swerving is an alternative to emergency braking when there isn't enough time and space to stop. However, effective swerving requires excellent countersteering skills that are well-practiced. To steer a motorcycle quickly requires a forceful push on the handlebars, which can be a real challenge for many motorcyclists. The rider who elects to swerve must also have the discipline to resist braking, because there is not enough traction to swerve strongly and brake hard at the same time.

Effective emergency braking and swerving both require excellent skills that many riders lack. This is another reason why it is unwise to rely solely on your braking or swerving skill to keep you safe. Yes, these skills are critical, but when you consider that you might have only two seconds to react, I think you'll agree that it is best to do all you can to avoid being faced with the need to use superhero skills in the first place.

Mental Block

If you frequently encounter close calls, then you must begin to identify the weaknesses in your mental skill development. These weaknesses may include impairment, a lack of awareness or unrealistic self-confidence.

One of the most significant factors that affects the ability to accurately judge and evaluate your surroundings is mental impairment. This can be in the form of alcohol or drugs, but it also includes emotional upsets, stress or distraction caused by thoughts or moods. Any one of these can cloud your judgment, reducing your ability to manage hazards and control your motorcycle.

Along with keeping your head clear, it is also very important to have a high level of awareness. Situational awareness is the condition that describes a person's ability to evaluate their surroundings so he or she may form a conclusion about what is occurring in the riding environment. The best motorcyclists are able to adapt to changing situations, but this cannot happen if focus and attention are lacking. One indication that your awareness may not be as sharp as it should be is if you often find yourself being surprised by hazards. Small clues exist telling you about possible hazards and it's up to you to identify them.

Other mental blocks that can cause problems are optimism, over-confidence and complacency. When a person feels totally in control he or she often lets down their guard. While confidence

Physical skills are important, but not at the expense of mental skills that ensure safety on the street.

is usually a good thing, you must never assume you are 100% safe. Continually evaluate your mental and physical skills and be honest with yourself about areas that may need improvement.

At the other end of the spectrum is fear. Fear is appropriate for preventing us from taking unwise chances, but excessive fear can also cause problems. It isn't uncommon to see a new rider putting him or herself at greater risk by traveling below the speed limit, timidly entering the roadway or grasping the handlebars with a deathgrip. This type of fear must be overcome as soon as possible, and the best way to do this is to practice both physical and mental skills.

Physical skills can be developed by taking a safety course and then practicing in parking lots and on lightly traveled roads. Practice mental skills by thinking about riding scenarios and imagining possible solutions. This can be done when sitting in your easy chair or when driving in a car. The idea is to exercise your brain to keep your mental skills sharp and well-rehearsed.

Well-developed mental skills are what get us through hazardous situations.

Strategies For Survival

When I ask experienced riders what strategies they use, I often hear phrases such as "Ride defensively" or "Ride like they are out to get you." These strategies are a good starting point, but the most useful strategies include specific actions. One example is when a car is waiting to turn left across your lane. Your strategy might include: *1)* Moving to the left portion of the lane for maximum visibility. *2)* Covering the brakes. *3)* Looking at the top of the car's front wheel for the first signs of movement. *4)* Moving to the right-center portion of your lane as you near the car to provide extra space between you and the hazard.

Be Seen

Motorcycles can be more difficult for drivers to see in the traffic mix. With this in mind, it makes sense to help drivers to see you. One strategy is to wear a light-colored helmet and bright clothing. Another even more important strategy is to position yourself in your lane for maximum conspicuity. This usually means riding in the left portion of your lane, but briefly positioning yourself to the right may be necessary to allow a driver waiting at a side street to see you. And be sure to ride far enough behind other vehicles to avoid "hiding" so that oncoming cars can easily see you.

Ride At "Expected" Speeds

It's important to ride close to the marked speed limit when near other drivers and especially when riding through intersections. A motorcycle has a narrow frontal area, which makes it more difficult to judge a motorcycle's approach speed and distance. Riding at a speed that is greater than is expected will likely result in the driver pulling in front of you, thinking he or she has time to go.

Cornering: Slow in, Fast out

The vast majority of single-vehicle crashes are the result of riders failing to negotiate a curve, and a common reason for this is a rider entering a corner at a speed that is too fast for the conditions or for the rider's ability. The best strategy is to slow to a conservative speed and then gradually accelerate when you are sure it is safe to do so. Keep in mind that you can always get on the gas, but you can't go back in time to enter the turn at a slower speed.

Even if you are a racetrack hero, you must understand that the unpredictable nature of the street does not allow you to exercise your full cornering prowess. With hazards such as road surface debris or liquids, unexpected changes in radius and camber, or other vehicles wandering into your lane, you can easily exceed the safe limits of the environment even though you may be nowhere near your personal limits.

Mental Practice

Both physical and mental skills are a learned and perishable commodity. You hear me tout the value of parking lot practice and track days to help keep skills sharp. These resources are great for advancing physical skills but offer limited opportunities for the development of the mental skills that are specific to the street riding environment.

Rider safety courses provide both physical and mental skill development by introducing street riders to strategies and explaining the importance of good mental skills. Unfortunately, a one- or two-day course can only introduce concepts. It's up to you to incorporate them into your own personal strategies for managing complex traffic and roadway situations.

Just like any skill, mental skills can become sluggish so that you are less able to manage the hazards around you. Consciously practice by playing the pretend video game when riding and when driving in the car. Also, consider going to the MSF website (http://www.msf-usa.org/riderperception) and taking the Perception Challenge, which can help you to identify weaknesses in your perceptual ability.

Continue to keep your physical skills in good order, but also make a concerted effort to refine your mental skills. It may seem less attractive than learning to corner like a hero, but your mental skills are what will most likely keep you safe from harm.

The Author

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