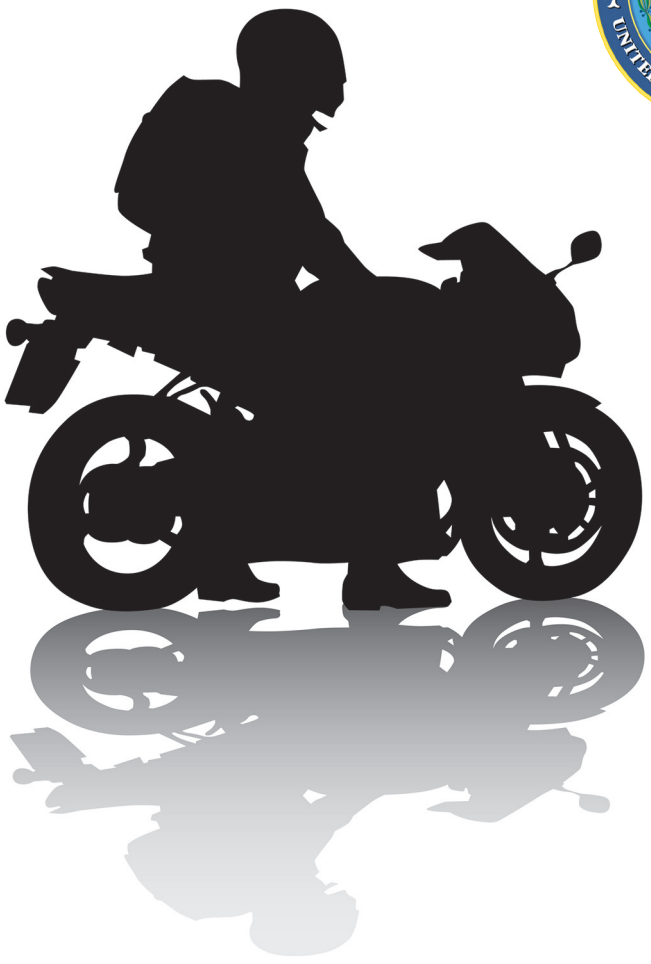
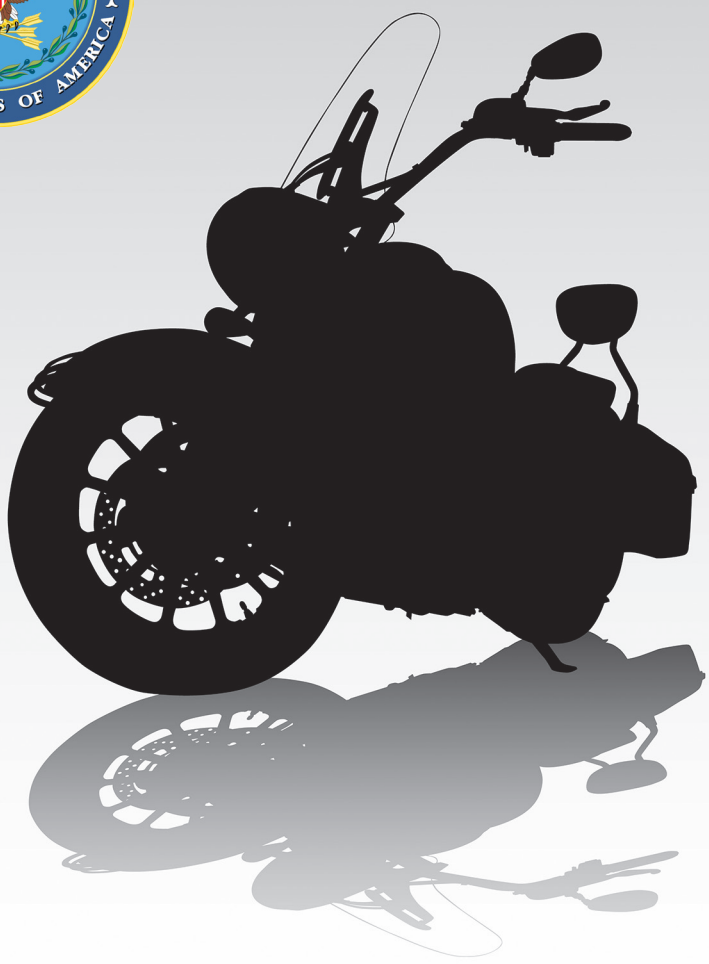
DSOC
Defense Safety Oversight Council

Motorcycle Mentorship Module 9

Distractions and Fatigue





Warning: Incorrect or inaccurate information could lead to tragic results on the road. If a question arises that is not covered in the guide and you don't know the answer from your own experience and training, simply state, "That is a great question, I'll get back to you with the answer."

Your Service Safety Center will help with these types of questions should they arise. Their numbers are as follows:

US Army Driving Directorate: **334.255.3039**

USMC Safety Division: **703.604.4459**

US Navy Shore Safety: **757.444.3520 x7165**

US Air Force Safety Center: **505.846.0728**

USCG Safety Division: **202.475.5206**

U.S. ARMY COMBAT READINESS/SAFETY CENTER

Preface

About: The Defense Safety Oversight Council (DSOC) Motorcycle Mentorship Modules are a set of thirty six (36) facilitation modules designed for the purpose of increasing rider knowledge on various aspects of riding and providing additional capability for self-policing within peer groups. The modules are intended as a mechanism to further decrease motorcycle related mishaps and fatalities within Department of Defense (DoD) by encouraging riders to talk, live, and think about the topic.

Using the Module: The module content enclosed is intended as a facilitation guide to assist you with discussing the topic. However, it is still critical to use your skills and talent to engage participants and develop "buy-in" on this subject from your group. To maximize this, motivate and moderate your participants, control the accuracy of participant feedback, and be mindful of their time.

Facilitation Guide for DSOC Mentorship Modules

It is recommended that this Mentorship Module be conducted in a facilitation style. Using the information provided in this Mentorship Module, you, as the facilitator, will lead a discussion on the subject. *You should not be conducting a lecture!* The facilitator's role is to help with how the discussion is proceeding. Participants will have much more "buy in" and connectivity with the information if they have input. One of your roles as the facilitator is to control the accuracy of the input and control the time. From the Mentorship Module, generate questions which will lead to group discussion. The more you let the group participate, the more success you will have.

Competencies of a Facilitator:

- Prepare prior to the event
- Make sure everyone gets a chance to participate and help members to express themselves
- Ask rather than tell
- Honor the group, display respect for the members, and acknowledge participant contributions
- Ask for others' opinions
- Listen without interrupting
- Demonstrate professionalism and integrity

The key characteristic distinguishing facilitation from other types of leadership, like scripted training, is that the outcomes are never predetermined in a facilitative setting. Although the background information provided with this Module remains the same, the result will depend on the participants, the knowledge and experience they bring, and the information that they feel they need to take away. The group uses the activities provided by the facilitator to unlock expertise, ensure thorough discussion, stay focused and reach decisions that are better than those any individual could come up with alone.

At the beginning of each Mentorship Event, discuss why the participants are there and what they will receive as a result of participating. Adults have limited time and they want to know "What's in it for me?" A facilitator should make training fun. Encourage humor and laughter in your Mentorship Event.

Principles of Adult Learning:

- ➞ Adult Learners want material that is relevant to them. "What's in it for me?" "What will I get out of this that will make a difference to me?"
- ➞ Adult Learners come to training events with varying amounts of experience. They like to share their experiences. If you have minimal or no motorcycle experience, you can still draw from your group.
- ➞ Even if you have motorcycle experience, you should draw from your group because people tend to remember what "they" said longer than what you said. Information that they "own" is more valuable to them.
- ➞ Facilitators are not always subject matter experts; nor do they need to be. Facilitators may draw on the existing knowledge of the participants and the information provided in these Modules.

Section I: Module Overview

Time Frame: One 20-60 minute facilitator-led discussion

Level of Prior Knowledge: Ideally participant is familiar with a motorcycle riding or is familiar with driving. Suitable participants include novice riders with learner permits, motorcycle endorsement, or any licensed roadway user, i.e. vehicles other than motorcycles.

Synopsis: Fatigue is a universally recognized sensation and condition. Complex motorcycle operations and different degrees of operator fatigue can create varying conditions of risk to the rider — from reduced response time to falling asleep while at the controls. Fatigue is similar to distraction in that fatigue can result in similarly undesirable events such as near misses, collisions, and single vehicle mishaps. Distractions, too, are undesirable for motorcyclists and are often the result of the rider's poor choices or distractions caused by other roadway users that endanger motorcyclists. Regardless of fatigue induced catatonic states or conscious choice distractions — riders can place themselves in high risk and high crash potential situations. Rider awareness of requisite conditions creating fatigue or distraction, coupled with education on counter fatigue and distraction strategies, are suggested paths in reducing fatigue and distraction related mishaps and injury.

Learning Objectives:

- Introduce basic knowledge and develop participant recognition of fatigue and rider distraction.
- Define fatigue. Describes or recalls conditions and behaviors manifested due to fatigue.
- Define distraction. Describes or recalls conditions and behaviors manifested due to rider distraction.
- Participant explores the behavioral differences and similarities of fatigued or distracted riders.
- Recall associated or relevant facts and personal experiences related to topic.
- Explore and discuss alternative behaviors that counter distracted or fatigued driving behaviors.
- Participant comprehends presented facts and knowledge—participant may offer alternative perspectives, contribute or supplement accurate statements regarding terms, facts, sequential events, and may share experiential knowledge.

Suggested Environment/Props/Handouts:

- **Handout Sheet 1:** Used for Module Activity on distractions

Section II: Module Discussion

Introduction: Facilitate discussion – What is fatigue? What is sleep deprivation?

Definition: Weariness or exhaustion from labor, exertion, or stress (m-w.com). Sleep deprivation occurs from lack of sleep "…typically when carried to extreme, such as wakefulness for more than 24 hours" (Barger et al., 2005; Peters et al., 1991). For the facilitators purposes fatigue is also any condition – related to disrupted rest cycles, mental or emotional disharmony, or distractions – that disables or diminishes a rider's full capacity and ability to operate one's motorcycle with the full attention of the rider.

Sample questions may include:

- ➤ What does the onset of fatigue induced sleeping feel like? Who has experienced sleepiness when operating a motorcycle? What happened? Why did you feel sleepy? What did you learn from that situation?
- ➤ What are possible or likely results of riding while fatigued or falling asleep? What can we do to prevent these events
- ➤ What situations put a rider into an emergency induced by fatigue or sleepiness?
- ➤ What conditions could create fatigue? How are some instances of fatigue and sleepiness unavoidable?
- ➤ How can you prevent mishaps and crashes related to fatigue?

Open discussions with participant-focused activities and introductions. Activities should encourage participant interaction and develop camaraderie and peer-relatedness. Ask for and encourage participant sharing of experiences related to the module topic — fatigue.

Suggested Discussion Areas:

Discussion Area: Fatigue and Riding

Facilitation Questions – How does fatigue relate to our ability to ride a motorcycle? What are the symptoms of fatigue and what happens at the onset of fatigue? How can we identify when fatigue is too significant a risk for riding? What behaviors counter the dangers of riding fatigued?

1. *Manifestation of fatigue:* Perhaps the most simple indicator of fatigue susceptibility is rider rest—does the rider feel rested and have they received an adequate rest cycle of approximately 7-8 hours of sleep? (We will discuss detriments to sleep and rest cycles later.) With adequate rest one might avoid symptoms of fatigue; however, other factors can contribute to fatigue as well.

   Rider performance is reduced with fatigue or during sleepiness. Measurable behaviors and consequences include physiological changes or impairments such as changes in heart rate, long eye blinks or closures, slow eye focus, diminished target tracking, slower reaction times, reduced vigilance (with mundane tasks), and attention lapse.

2. *Sleepiness and fatigue:* Fatigue can exist within an operator who is fully rested. Fatigue may surface during boring or mundane activities, so lack of sleep is not the sole factor in determining fatigue. Fatigue can induce degradation in performance due to emotional distractions such as discord within a relationship, significant life events, or death of someone close. Also, hyper excitement or elation might quickly consume concentration resources and awakened states inducing a sudden onset of fatigue distraction—a post adrenal response can suddenly tap all energy and wakefulness within a person.

3. *Disrupted rest cycles, wakefulness, and sleepiness:* Adequate rest cycles are important in reestablishing wakefulness, energy, focus and concentration, and combating the effects of fatigue. Sleeping is part of the rest cycle and more importantly adequate amounts of quality sleep are necessary in maintaining wakefulness and increasing resistance to fatigue. Interrupted sleep cycles related to sleep apnea, traumatic life events, and poor sleeping environments increase susceptibility to fatigue and sleepiness. One must understand that typical sleep intervals and rest cycles are not necessarily an indicator of fatigue and sleepiness resistance. Many people who have sleep apnea are not aware of their condition. It's important to understand how susceptible one is to fatigue and sleepiness particularly when adequate sleep time does not result in a refreshed feeling upon waking up.

Section IIA: Module Discussion

Introduction: Facilitate discussion: What is distraction?

Definition: The state of being distracted; especially: mental confusion (m-w.com). For the facilitator's purposes, distraction is any external or internal stimulus or task that diminishes the rider ability, focus, and concentration while operating a motorcycle.

> "A grave problem that developed in New Hampshire…now has all the motor-vehicle commissioners of the eastern states in a wax. It's whether radios should be allowed on cars…" (Nicholas Trott in 1930, as cited Goodman et al., 1997)

While there is much debate on the use of technology while operating vehicles, general agreement exists that anything other than operating the vehicle is a distraction, in varying degrees, to the operator. Sadly, many mishaps are preventable and often distracted driving resulting in a crash is a conscious choice made by the operator—the operator creates risk to safe operation of their vehicle for the sake of entertainment or ones need for stimulation during low task driving or riding.

> "Jacqueline Dotson was seriously injured in an accident near Winchester, KY., in February that police say happened when she last control of SUV and ran several other cars off the road before overcorrecting, which caused the SUV to roll over a guardrail and land upside down. A rescue crew labored an hour and a half with the "jaws of life" to extricate her from the vehicle. One of her arms was severed in the accident and lying on the road, still grasping a cell phone." (*City Paper*, News of the Weird section, March 6, 2006)

Open discussions with participant-focused activities and introductions. Activities should encourage participant interaction and develop camaraderie and peer-relatedness. Ask for and encourage participant sharing of experiences related to the module topic – distractions.

Sample questions may include:

- ➤ What types of distraction might motorcycle riders have?
- ➤ What distraction do riders create?
- ➤ What distractions exist beyond self-created distractions?
- ➤ What non-rider (other roadway users) distractions create hazards for motorcyclists?
- ➤ What experiences do you have—concerning distracted riding or driving?

Discussion Area: Distractions

Facilitation Questions – How do distractions reduce or ability as motorcyclists and roadway users? What can we do to ignore or prevent distractions as riders, as car drivers, as other roadway users? How do we allow ourselves to accept our self-induced distractions?

1. *Our distracting behaviors:* When bored or fatigued, devoting all of one's attention to riding or driving is difficult and often one desires to occupy oneself with non-driving tasks—as a means of relieving the boredom of low task driving low interaction driving. Diverting attention to a

non-riding task includes all activities not necessary to operating the vehicle. Examples would be: thinking about thirst, thoughts of work or recreation, singing to oneself are all diverted attention activities; also, adjusting a radio, CD player, digital music device, and using a communication device (talking or texting) are distracting and divert attention from the task of riding. Paradoxically, multiple operator tasks are not always distracting. Consider aircraft pilots, they routinely and safely operate in high-task environments because all the pilots' tasks are related to the safe operation of the aircraft. Distracted riding is primarily caused by all the non-riding tasks that detract from a rider, or drivers', task of operating the vehicle. The volume of tasks has less to do with increased potential of crashing than the non-driving related task itself. David Shinar explains in *Traffic Safety and Human Behavior*, "Sustained complete attention to driving may be an impossible goal to achieve…" and "…sustained attention to the road becomes more difficult as we become more experienced and skilled…" (Shinar, 2008, p. 556).

2. *Distractions by other roadway users:* Interestingly, studies suggest most roadway users perceive the dangers of distractions and yet many admit in participating in the same distracting behaviors. These distracting behaviors include: cell phone use, eating, drinking, manipulating audio controls, smoking, reading, writing, grooming, conversations with passengers, navigating or operating telematics, romantic moments and using wireless internet access.

3. *Distractions as a social norm:* Technology enables distractions whenever the activity distracts the rider or vehicle operator from concentrating on riding or driving. Varying studies summarize distraction and distracted behaviors as embedded in our driving culture—it is who we are.

4. *Distractions due to environmental conditions:* Wind, cold, excessive heat and rain make you tired more quickly. The amount of time spent on a motorcycle should be limited to about six hours a day with rest stops at least every two hours.

Activity: Distractions

Provide participants Handout Sheet 1 (page 11) and provide instructions.

- Each participant should consider each pair group and circle the more risky of the two riding or driving behavior.
- After each participant selects 1 or 2 of the first group A, divide the participants into two groups. One group is comprised of those who select choice 1 and the other group is comprised of those who circled choice 2.
- Have the individuals, within each group, discuss why they felt that activity was more risky than the other option.
- After five minutes of discussion, have each group report their findings to the other group.

There are no incorrect answers—the intent is to demonstrate perceived risk and understand the potential for a crash when distracted. After each group presents their finds—ask if anyone has done similar things while riding or driving. Continue in the same manner for each pair group A – E.

For larger group discussions the facilitator may divide participants into 5 equal and smaller groups and assign one pair group to each group for small group discussions.

Wrap-Up:

Brief or discuss the following:

Fatigue: The key message for participants is to understand fatigue and what it is. Lack of sleep is not the only condition of fatigue — boredom, emotional distress, and high task and high stress environments may create behavior indicative of fatigue.

Distractions: Distractions may seem easily identifiable and yet many riders create their own distractions such as inattention, using technology and electronics related or not related to the riding or driving task. Too, passengers (motorcycle and cars) and other roadway users contribute to external distractions—many times for the same reasons riders distract themselves. Sometimes the most reported operator distraction is not the most hazardous riding or driving behavior.

Distracting behaviors: Most riders and car drivers tend to fill low-task riding episodes with entertainment or activities with non-riding/driving tasks. Listening to music, eating, smoking, texting, and conversations are distractors significant enough to prevent correct rider decision making—particularly when full operator concentration and attention is required.

Suggested Wrap-Up Discussion:

➤ Ask participants how they would apply the knowledge they gained from this discussion to their ride home or their next ride with friends. What opinions or preconceptions about fatigue and distractions have changed?

Distribute copies of the DSOC Motorcycle Mentorship Module Evaluation form to all participants and request that they deliver or mail the completed form to the Command or Command Safety Office for processing.

Remind everyone to ride safe, and see you at the next Mentorship Meeting.

DSOC Motorcycle Mentorship Feedback Form

Presenter Name:	Date:
Topic/Title:	Unit Number:

Please review each statement below and check the response that closely matches your experience in the Mentorship Module today:

1. Please rate the presenter's performance:

☐ Prepared ☐ Not Prepared | ☐ Engaging ☐ Not Engaging | ☐ Led Discussion ☐ Lectured

Comments:

2. I was given opportunities to participate in the module's discussion

☐ Never ☐ Only Once ☐ 2-4 Times ☐ Many Times Throughout Discussion

Comments:

3. With regard to my personal riding experiences, this discussion was:

☐ Relevant ☐ Not Relevant | ☐ Interesting ☐ Not Interesting

Comments:

4. This discussion topic has provided me with specific learning points that I can use to be a safer, better informed rider

☐ None ☐ One Idea or Fact ☐ 2-4 Learning Points ☐ 5 or More

Comments:

5. I would be interested in participating in other Motorcycle Mentorship Module discussion topics

☐ Never Again ☐ Willing to Try Another Module ☐ Would Like to Do Modules Regularly

Comments:

Thank you for your participation. Please make note of any other suggestions or comments below (continue on the back if needed):

Deliver or mail this completed form to the Command or Command Safety Office for processing. Please do not return this form directly to the Module Presenter.

Resources

Continued Reading:

Bohner, G. and **Wanke, M.** (2002). *Attitudes and Attitude Change*. East Sussex UK: Psychology Press

Parks, L. (2003). *Total Control.* St. Paul MN: MBI Publishing Co.

RAND (2010). *Understanding and Reducing Off-Duty Vehicle Crashes Among Military Personnel.* (DSOC Contract W74V8H-06-C-0002), Arlington VA: RAND Corp.

Shinar, D. (2008). *Traffic Safety and Human Behavior.* Bingley, UK: Emerald Group Publishing

Wu, H. and **Yan-go, F.** (1996). "Self-reported automobile accidents involving patients with obstructive sleep apnoea." *Neurology*, 46, 1254-1257

www.nhtsa.dot.gov:80/people/injury/research/wireless/

www.awake-eu.org/

www.fmcsa.dot.gov/rules-regulations/administration/fmcsr/fmcsrguide.aspx?section_type=V

Definitions: *(As defined for purposes of this module.)*

Attentive: Act of listening or watching carefully and with concentration.

Crash: A collision involving a moving vehicle or aircraft

Distraction: Something that interferes with concentration or takes attention away from something else

Fatigue: Extreme tiredness or weariness resulting from physical or mental activity

Mishap: Crash

Telematics: Use of mobile communication, navigation, or situational awareness (anti-collision) device

Handout Sheet 1: Distraction Exercise

Consider each paired group and circle the activity that you believe is more risky while operating a vehicle.

A

1. Talking with passengers
2. Talking on a handheld cell phone

B

1. Eating or drinking
2. Changing radio stations or looking for CDs/tapes

C

1. Reading a map or directions
2. Personal grooming

D

1. Reading printed material
2. Surfing the net

E

1. Texting
2. Talking on a mobile radio (CB/HAM/Land Mobile Radio)

ACKNOWLEDGMENTS

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Some of the principal contributors to this effort include the following:

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MILITARYRIDER
THE RIGHT SKILLS>THE RIGHT TRAINING>THE RIGHT ATTITUDE

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