Stimulus – Response Training involves training a student to perform a specific desired response when presented with a specific stimulus.
Stimulus - Response Training

Stimulus – Response Training appears simple when viewed from the surface. In reality, there are numerous factors that will effect the success of instructors ability to consistently have a specific stimulus elicit a specific response from their students.

Using the Shockknife will add several further possibilities to enhance behavior modification beyond normal stimulus – response training for edged weapons.
Conditioning Responses with Shocknife
Shockknife Stimulus – Response Training
Utilizes:

1) Operant Conditioning
2) Principles of Punishment Conditioning
3) Escape & Avoidance Conditioning
Operant Conditioning

Operant Conditioning involves training the student to consistently perform a specific response when presented with a specific stimulus.

For example: Teaching a student to draw their firearm whenever they see an individual approaching them with an edged weapon.

Stimulus – Response Training typically occurs after Static Training. This is because the students need to learn the proper response before they can pair it with the proper stimulus.
The Principle of Punishment

In behavior modification, punishment is referred to as an occurrence immediately following a behavior that will cause that specific behavior to decrease in frequency.

For example, a student that grabs the blade of the Shocknife will be delivered a shock to the hand. This punishment will decrease the frequency that a student will grab the blade of the knife.

This Physical Punishment is sometimes referred to as Aversive Stimuli.
Increasing the Effectiveness of Punishment
How to Increase the Effectiveness of Punishment

There are several ways to increase the effectiveness of Punishment when using it for behavior modification:

1) Maximize the chance the student will perform the desired response.
2) Minimize the cause of the response that will be punished.
3) Select an appropriate punishment.
4) Deliver the punishment as soon as possible after the undesired response.
Maximize the Chance the Student will Perform a Desired Response.

It is important that if you observe an undesired response from your students that you supply them with an alternative desired response.

Let’s look at how this would apply to a student who has performed a grounding and control technique but grabs the blade of the knife to remove it from the attacker’s hand.

The Shocknife will deliver a shock as punishment to the hand of the student. This will help decrease the behavior of grabbing the knife by the blade.

The instructor should not just point out how the student was punished for grabbing the blade. The instructor should provide a student with a desired action to remove the knife without being shocked. In this case the instructor may show a wrist lock or some similar action that prevents the student from having to grab the blade, thereby prevent the punishment of being shocked.
Minimize the Cause of the Response that will be Punished.

The instructor must anticipate specific actions that will lead to the delivery of the punishment.

The instructor should strive to include appropriate conditions that will minimize the likelihood of the student having to be punished with a shock.

Let's look at our example of a student grabbing the blade again. Let's say an instructor observes that a high number of students are grabbing the blade of the knife when removing it from a controlled subject. The instructor believes that the students are doing this because they are rushing to remove the knife after the subject has been controlled.

The instructor can teach actions to be used at that specific point to ensure the student does not rush and grab the blade. For example, teaching the subject to pause, break tunnel vision then move their hands to the wrist of the subject only.
Select an Appropriate Punishment.

With the Shocknife the specific type of punishment is always the same. It is a localized shock delivered to the student.

However, the Shocknife has the ability to adjust the level of shock being delivered.

Typically during Stimulus – Response Training the Shock Adjustment Screw is set at Medium. In most cases, this will provide enough of a shock to punish undesired behavior.
Depending on individual responses to shock and pain stimulus, this setting can be too high or too low.

The instructor should strive to only use as much of a shock as necessary to reinforce the desired behavior.

If you notice a student becomes hesitant in their technique after being shocked, turn the Shock Adjustment Screw down and advise the student that it has been turned down to a lower setting.
If you notice a student consistently performing an undesired response even after being shocked then turn the Shock Adjustment Screw up higher to deliver a bigger shock.
Deliver the Punishment as Soon as Possible After the Undesired Response.

Any undesirable response involving the blade of the Shocknife will result in an immediate punishment being delivered.

This is the advantage of using the Shocknife over other edged weapon training products such as marking blades (blades that deliver a color compound when touched). Marking blades provide feedback and but the mark is typically not found until long after the undesirable behavior has been performed.

This being stated, Shocknife supports all training tools that assist in helping students survive an edged weapon attack.
Note on Punishment for Instructors

When utilizing the principles of punishment by using the Shocknife to deliver a shock, the instructor should not follow this up with any negative comments. This type of negative reinforcement will compound the punishment and may cause the student to lose motivation, feel resentment towards the instructor or become overly stressed.

As stated, provide positive reinforcement by showing your students the desired response. Provide positive reinforcement when they perform the desired response. This will ensure they stay focused, motivated and associate you the instructor with a positive learning experience.
Escape and Avoidance Conditioning

Escape and Avoidance Conditioning involves using a punishment to encourage a desired behavior.

As you just learned, punishment conditioning used adverse stimuli to decrease the frequency of an undesired response, conversely Escape and Avoidance Conditioning uses adverse stimuli to increase a desired response.
Escape Conditioning

Escape Conditioning or what is commonly referred to as negative reinforcement will always proceed Avoidance Conditioning.

Escape Conditioning can be described as utilizing an adverse stimuli to modify a behavior to the desired response.

For example, let’s say you teach a system that utilizes the arms to block a forward slash attack with an edged weapon. Your goal is to have the students deliver the block to the limb of the attacking arm without being “cut” by the edged weapon.

The Shocknife would assist this behavior by ensuring every time the student performs the block in a manner that would have resulted in them being “cut” a shock will be delivered to the shocking arm. This will result negative reinforcement will force them to adjust their response until the shock is no longer delivered (meaning they are not being “cut”).
Once they have become proficient at delivering a proper response (in this case a proper block) they will now be using the principles of avoidance conditioning to further reinforce the correct behavior.

The difference is that adjusting their technique to prevent being shocked again (Escape), they now reinforce this correct technique by performing repetitions in the proper manner that will ensure they are not delivered a punishment (Avoidance).
As you can see, Avoidance differs from Escape as it reinforces the correct response by avoiding the possibility of being shocked.

In most cases, the fear of being shocked will result in Avoidance conditioning without the need to experience Escape Conditioning.
Note on Escape and Avoidance Conditioning for Instructors

The instructor must ensure that they are observing students performing the desired response.

The student may find some other response other than the one being taught that eliminates the punishment. It is the instructors responsibility to recognize this as soon as possible and make appropriate corrections.
Introducing Stimulus – Response Training to Students
When conducting Stimulus – Response Training with Shocknife all attacks should be less than half speed and eye protection must be worn.

Any type of attack can be used during this level of training but the Safety Monitor must ensure that the attackers:

- NEVER deliver a shock to the neck, face, spine and groin of the student.
- NEVER follow through and touch the body of the student with any other attack other than a slashing attack.
- NEVER modify the attack that is being taught without being instructed to do so by the Safety Monitor.
One of the most obvious differences between Static Training and Stimulus – Response Training, is that during Static Training only the student moves while the attacker stays stationary in an attack position.

During Stimulus – Response Training the attacker now delivers the attack in a slow controlled manner and allows the student to respond as they have been taught during static training.
The instructor must ensure that they demonstrate the proper attack (stimulus) in the same manner that they would demonstrate the response during Static Training.

The instructor should demonstrate the attack using the three C’s: Clearly, Correctly and Cognitively.
The attacker should be taught to deliver the attack in a clear and deliberate manner so that it is easily identified by the student.

The attack should never be delivered faster than half speed when the stimulus is first introduced.

Allow each student to increase the speed of the stimulus as they become proficient at delivering the appropriate response. This will be different for each student depending on their level of proficiency.
The Safety Monitor should ensure that the student never exceeds a speed that results in the desired response being delivered improperly or in the attacker not being able to control the Shocknife.

Remember always enforce the Safety Rules!
You are now ready for the Chapter 5 quiz.

Lesson.
Right click on this program's button on your computer's task bar and select close to end this lesson.