Dear Colleagues

**Thinking changes upon mastery of shooting techniques**

**The Problem:**  when starting to learn the techniques of rifle shooting, a new shooter typically lacks confidence. On occasions many experience nervousness and need to overcome bouts of flinching. This continues while learning shooting techniques. For most of their lives most shooters continue to lack confidence in their abilities.

Lack of confidence occurs when a TR shooter does not position the forward elbow directly under the rifle, to ensure it is dead still, for aiming and releasing each shot. As a result the shooter is quite often forced to cease aiming, return the foresight back onto the target, then re-aim. Very often, the shooter has a habit of raising the pelvic girdle, then to replace it and change the natural point of aim. This causes a serious loss of points. Many shooters do not realise that a new group well out of the V-bull, cannot be easily re-centred through sight movements alone, but requires movements of a leg and/or the navel. After this, the group needs to be brought to the centre of the V-bull. Similarly, an F Class shooter’s hand on the pistol grip experiences changes in tension, causing trigger-release to vary from shot to shot. Uncertainty results, as to whether a group will remain within the 6-ring or spread over the bullseye.

Lack of confidence is not unique to those learning to shoot. Students who study a branch of science, management, acting, teaching, training as legal counsel, piloting an aircraft or to become a concert pianist, find that thinking can differ greatly while learning. Scientists who have become rifle shooters, confirm that such changes definitely occur while learning.

The real problem for those at middle level, is that they cannot see how they will be able to improve in order to progress to the next stage. They cannot see how they may change and experience little or no nervousness. It is certainly not unique to rifle shooting because in the past, persons who succeeded in this were described as having ice in their veins.

A leading shooter is considered by many to:

* use shooting techniques with the highest level of skill
* shoot completely free of nervousness and with confidence in his/her abilities
* think independently and able to select the technique for each circumstance
* understand the level of skill, style, timing and end-result needed
* be completely free of phobias and illogical thoughts.

This article describes how individuals in rifle shooting (and other fields) have risen to the very top. Speculation on this subject has however led to the waste of an enormous quantity of ink. The writer felt obliged to list commonly held ideas which should be filed in the bin.

**Discussion:** individuals pass through developmental stages as they grow. Self-esteem and internal locus of control are barely noticeable in early life. During the teenage years they may become critically important and continue to develop throughout the life-cycle. Self-esteem is an aspect of the mind which allows an individual to perform tasks at a level corresponding to his/her sense of personal worth. For example, a person with limited feelings of self-worth, may not feel a need to consider behaving in a responsible manner. On the other hand a person with a greater sense of self-worth, may without hesitation, behave with full awareness of the need to be responsible. In a further type of thinking, a person may require support from others before being prepared to make a decision to act. Whereas, a person capable of independent thought, may come to a decision to act upon one’s own thoughts. This person is considered to have a developed internal locus of control.

During developmental growth most individuals acquire increased levels of self-esteem, which appear to be mirrored by an increase in independent thinking.  Both self-esteem and internal locus of control are critical in the development of a young person and hence, should be of major interest to a sport coach. Unfortunately, schools and sporting organisations differ in quality, so that these important features are often barely understood.

Indications of such developmental changes occur upon a shooter mastering techniques. When a shooter experiences mental changes associated with mastery of important techniques, there are residual effects which are permanent. This may lead sports people at the top of a field to consider they are capable of learning in another field. They find they can utilize thinking processes acquired earlier. As a result there are persons who repeat their hard work in another field. Hence, mental changes appear to be carried over from one field to the next.

The first step involving the learning and mastery of techniques, under the guidance of a very experienced coach, leads directly to the building of self-esteem. As members of a rifle club successfully master each shooting technique, a club-wide attitude of acceptance and belonging can be felt among members. As well, individuals will benefit from the club captain’s management of self-efficacy. These important factors are academically recognised as directly contributing to the building of self-esteem and internal locus of control. Care needs to be taken to avoid negative behavior in a club, which can detract from the self-esteem of individual members. A well-known negative factor is the autocratic and perhaps bullying behavior of a coach and members toward those who succeed in mastering techniques.

Sadly, many sporting organisations of western countries, show little interest in the advancement and progress of their members. This may continue until change is motivated by government, the media or upon the selection of a member to represent the state or country.

**Practical:**  a sport person who has also been educated in the sciences, will immediately recognise when a sport is being run by individuals with little understanding of the need for a coaching system. It is common for the techniques of a sport to be little understood, so that the advancement of individuals is affected by personal opinion, guesswork and sheer speculation.

In practice, a coach knows a field intimately, enabling learning exercises to be designed, practised and the learner’s efforts monitored. Where individuals are recognised as exhibiting enhanced self-esteem and internal locus of control, these are the criteria by which sport performers are raised to higher levels, i.e. upon introducing them to further techniques. Throughout, a coach needs to monitor and document self-esteem and indications of internal locus of control, based upon external indications (without the subject’s self-assessment). It has been found that a new member’s overall enhancement in rifle shooting may be planned and monitored over a period of two or more years. While learning, a person’s phobias can also be identified, enabling well-designed exercises to reveal and remedy illogical practices.

The learner should regard shooting on the home range as student-centered learning. There is no place for teacher-centered learning, i.e. in the classroom, because in this sport all learning is the result of effort on the firing point. The coach may ideally sit with a telescope behind the firing point and in this time, correlate the groups and peculiarities of several shooters at a time. A club of 20 or more shooters (TR and F Class) may in this way be individually taught a curriculum of techniques, while the coach diagnoses the groups, e.g. from Hexdatabase or Ozscore. Surprisingly, this can be done by email, as was demonstrated over a five year period with an isolated rifle club in Australia.

**Conclusion:**  it has been demonstrated repeatedly that the enhancement of thinking of both new and mainstream shooters, may be correlated with the building of self-esteem and internal locus of control. Work with a test rifle club has shown that a learner may acquire the status of a leading shooter within two years.

**Recommendation:** a considerable amount of dogma exists, which describes the enhancement of a shooter. It is however unsupported by experimental evidence. The following may be safely filed in the bin:

* only a person with special gifts can succeed
* a learner needs to inherit higher-level skills from a relative
* becoming a leader results from many have been called but few chosen
* a gifted person does not need to work as hard as everyone else, i.e. to learn techniques which come naturally
* I was never taught and it all came naturally
* I experimented and taught myself the whole field of rifle shooting
* I graduated from the University of Life, where I learned what was needed in shooting
* I congratulate my club members for throwing me in the deep end, where it was decided that I should float instead of sinking

Best regards

Geoff