

OVERCOMING PSYCHOLOGICAL BLOCKING IN GYMNASTICS



Virtually 70% of high level gymnasts have experienced psychological blocking -- the inability to perform a skill previously performed with ease. Only a small percentage of these athletes experience blocking to the point that it disrupts their performance. Nonetheless, for those who do, the experience is devastating.

Occasionally, a clear-cut starting point identifies the origin of the psychological blocking problem – a serious fall, a near catastrophe or a painful collision may precipitate the blocking. Perhaps, observing such events happening to another was the precipitating condition. More often, however, the cause is difficult to pinpoint. Our research shows that blocking has a number of predictable characteristics (Feigley, Robbins & Berger, 1989):

a) it generalizes backwards within a sequence of skills. For example, blocking on the back somersault phase of the roundoff, back handspring, back somersault sequence quickly spreads to the back handspring and frequently to the round-off itself.

b) it generalizes across skills. For example, a problem on the back salto on the beam quickly spreads to a back salto on the floor and/or to a back walkover on the beam or the floor.

c) Athletes susceptible to blocking have similar characteristics. They are:

- 1) very bright
- 2) fast learners, at least initially.

Their high intelligence and rapid rate of learning often results in their learning skills without learning intermediate steps. This characteristic has been noted as a possible cause or factor related to a cause in a study of trampolinists (Day, Thatcher, Greenlees & Woods (2006).

The reactions of coaches also follows

predictable patterns. At first, they are patient, providing encouragement and understanding to the gymnast. When that approach fails to solve the problem, they become impatient and irritable, often leading to confrontations as the coach “demands” the performance which both the coach and the athlete know is well within the athlete’s physical capacity. After all, the definition of blocking is that the gymnast has already performed the skill successfully, often for long periods of time before the blocking occurred. Frequently, the coach will “back off,” giving the gymnast several days or weeks to “get away from the problem.” When the problem still persists, the confrontational style begins again.

Psychological blocking typically evolves through three major stages. At first, the problem is simply being unable to perform the skill. That inability may be a specific fear of injury or more commonly

it involves a vague unspecified fear. Sometimes, the cause appears to result from small biomechanical errors that are so small that they are not recognized by the gymnast or coach. These tiny errors do not prevent the execution of the skill in a practice setting such as a back handspring performed on a low, wide practice beam but become major debilitating factors when performed on the 4" wide high beam where the margin for error is much smaller and the hand placement on the beam changes the gymnast's base of physical support. The block is often accompanied by an inability to visualize the performance of the skill. The second phase, which usually develops weeks or months after the initial blocking continues, involves emotionally conditioned negative affect, a form of classical conditioning. The anger, shame and guilt which arise from the inability to perform a skill previously mastered becomes associated with specific, naturally occurring cues associated with that skill; e.g., the balance beam itself elicits shame and avoidance because it is the site where repeated failures to perform have occurred when the gymnast blocks on a back handspring on the beam. The agitation experienced by the gymnast may come from 1) a loss of face before the coach, an authority figure; 2) embarrassment from the public failure before teammates and parents; and/or 3) from their own personal confusion about "I could do before; why not now?" Athletes suffering from this problem regularly

express a dislike of having others watch them while they are struggling with the problem. The third phase develops after month or years of dealing with the same problem. The gymnasts begin to make negative attributions about their ability or their courage. Questions such as "What's wrong with me?" or "Why can't I do this, especially when my teammates can?" begin to morph into statements about personal ability or self-worth. They gradually become "I'm not good enough" or "I'm a coward" or "I'm a mess." Such negative attributions are much more difficult to eliminate after the gymnast has made such negative self-judgments over a prolonged period of time and the evidence of their failures is literally "right in front of them."

Frankly, we do not know what causes psychological blocking. The cause remains a mystery despite some educated guesses. What we do know is that blocking is more frequent than commonly thought and that it occurs in other sports such as springboard/tower diving and trampolining. It's called the Lost Move Syndrome by trampolinists (Tenn, 1995a, 1995b). We also know that it is easily compounded by the two additional problems described above: The classically conditioned negative emotional responses and the negative self appraisals.

Collins, Morriss and Trower (1999) studied the recovery of elite level skill in javelin throwers. The sport they examined was quite different from

gymnastics but the goal of the athletes to recover a previously lost skill was quite similar. They suggested three possible causes. First, an athlete might be actively inhibiting the skill because of fear of injury. That is an intuitively appealing answer for gymnasts but what little research is available suggests that fear of injury is not the primary cause (Day, Thatcher, Greenlees, & Woods, 2006). Using a semi-structure interview technique with 15 high-level trampolinists, Day et al. (2006) found repeated comments that fear of injury was not uppermost in the trampolinists' minds. One such illustrative comment was "I never thought I'd hurt myself. I was scared of the move, not what might happen afterwards (Page 161)."

Second, the disruption might arise from the athlete's attempts to exert too much conscious control on what would normally be a highly automated task. The classic description of "paralysis by analysis" might be at least a partial causal explanation. A major shortcoming of this explanation is that gymnasts regularly complain that they cannot visualize the skill (Feigley, 2001; 1985). Overanalysis presumably requires the ability to picture or at least think about the movement skill.

Third, Collins et al. (1999) suggested that the blocking might be related to the athletes' inability to access the motor program for the desired skill. While this cause is consistent with motor learning research, because it relies on internal, theoretical motor schema, it has little practical value for coach.

The following suggested recommendations are a program, not a quick fix.

RECOMMENDATIONS:

1) Help the gymnast develop

a sense of perspective -- Blocking is a problem to be solved, not a character flaw nor a personal weakness. Others have had this problem and successfully solved it. You are not the only one. Just as importantly, start with the assumption that the athlete is motivated to solve the problem.

2) Use "windows of opportunity." Windows of opportunities are very brief chances for the gymnast to perform the blocked skill. For example, once the gymnast is properly warm-up and has had the opportunity to rehearse the appropriate lead up skills, the coach might say, "Okay, now that you've told me you are ready, we have 15 seconds to perform your back handspring once you've gotten up on the high beam. If you don't go within that time frame, step down off the beam and prepare once again before mounting the beam. We're only going to attempt this three times. If we haven't done it by then, we're finished and will have another opportunity to try it tomorrow."

The primary purpose is to give the athlete multiple opportunities for success without prolonging the amount of time the athlete is in a double-bind situation. A double-bind refers to the situation in which the gymnast is damned if she does and damned if she doesn't. If she attempts to perform the skill, her fear rises to intolerable levels. If she doesn't perform the skill, she is shamed in the eyes of her coach and in her own eyes as well. The brief opportunity to perform places the emphasis on "getting ready" rather than maintaining the athlete in a situation that is characterized by punishment, shame and frustration. "Getting ready" involves both getting

mentally set to perform the skill which the gymnast fears and rehearsing the prerequisite foundation skills.

The brief periods of time (i.e., the opportunities) also help the coach and gymnast to avoid focusing on the frustrating nonperformance over long periods of time. It is also extremely important that the coach presents tomorrow as the next step without guilt, sarcasm or disappointment.

3) Avoid using guilt when moving on. Gymnasts are highly likely to feel shame and frustration even though their outward expressions may not reflect those feelings. The strong emotions that characterize these situations cloud the issue. If the gymnast is in the blocking situation for prolonged periods of time where the strong emotions are continually present, those emotions become linked to the circumstances, e.g., standing on the beam for a series of back handsprings. The gymnast learns via classical conditioning to link the anxiety with the specific circumstances associated with blocking (e.g., standing on the high beam). These conditioned emotional responses compound the problem rather than leading to a solution to the blocking.

4) Minimize the amount of emotion associated with the blocking. Be matter of fact in your communication and instruction with the gymnast – “You’re not ready yet. Let’s get ready.” The frustration is shared by the gymnast, coach and parent because there seems to be no apparent cause of the psychological block. The block, however, is rarely, if ever, due to a lack of motivation on the part of the gymnast. Avoid additional emotional reactions during the instruction and provide steady but sincere encouragement.

5) Set a realistic time frame for the “cure” -- Months, not weeks. If the problem has been

identified early, the prognosis for recovery is likely to be shorter than if the problem has existed for six months. The phrase “a mile in, a mile out,” reflects this perspective.

6) Design progressions with alternative successes/ conclusions. Design the training so that there is always a logical finish to the assignment regardless of whether blocking occurs. An unfortunate characteristic of blocking is that the gymnast stands motionless on the apparatus for long periods of time, locked in indecision. During these prolonged periods, emotions become conditioned, frustration and shame increase, the equipment is unavailable to teammates, public embarrassment grows, and the gymnast begins to question his or her ability. Having a logical finish allows the gymnast to move on and minimizes the prolonged periods of failure. For example, the assignment might be to make three attempts to do a back handspring sequence within 15 seconds after mounting the beam. If the attempts are not made within that 15-second period, the opportunity is finished. After three attempts that portion of the workout is over, even if the gymnast requests additional attempts to “do it.” While at first, the gymnast may perceive such a finish as a relief, within a few days, those periods will begin to be seen as opportunities to be worked toward as opposed to an event to be dreaded. Unless they are prepared, they won’t have the opportunity to master the skill, keep up with the others, or prepare for an upcoming competition. Examples of progressions with alternative successes are:

- ✓ 50 attempts with a spot or 3 not necessarily consecutive attempts without a spot.
- ✓ 25 attempts with a spot or 1 without a spot
- ✓ 50 tries with a spot or 3 in a row without a spot.

7) Practice mentally imaging successful attempts.

This imaging may not be easy. Gymnasts may have difficulty picturing the skill in their mind (a strong characteristic of blocking); or they may consistently see themselves performing errors as they execute the skill mentally. They can enhance the positive mental performance by watching others who can successfully do the skill (or a videotape). If they can perform the skill with a spot but balk when attempting it alone, have them alternately perform the skill with a spot and then immediately attempt to visualize the skill attempting to duplicate the sensation experienced while actually doing the skill. Those sensations might be feeling the impact of landing on the beam while performing a back handspring or smelling the chalk dust on their hands or feeling the texture of the balance beam or the floor. In other words, link the physical sensations closely in time with the attempts to visualize and increase the number of naturally occurring sensory cues to increase the vividness and validity of the mental image. Initially, give mental assignments which are easy; i.e., image at least three successful attempts. When the gymnast is successful, increase the difficulty of the assignment in reasonable, progressive steps, just as you would with physical performances; i.e., 10 successes regardless of the number of tries; then five in a row without a miss; then 10 in a row, etc.

8) Never mislead the athlete about whether you will or will not spot. A common belief is that if the coach pretends to spot, then withdraws their support, they will be able to convince the gymnast that the gymnast really did the skill without assistance. In fact, the gymnast already knows they can perform the skill. Fear and uncertainty are blocking their performance. To suddenly withdraw the spotting in the middle of the skill is more likely to increase uncertainty than to decrease it. Further, the trust between the coach and gymnast is difficult to sustain if the coach is perceived as tricking the gymnast into performing without a spot. Finally, the goal is for the gymnast to overcome the fear through his or her own efforts. The perception of being "in control" of the risk is an important part of this success.

9) Let them know they are not alone. Have gymnasts with the problem talk to one another. Let them realize that they are not alone; they are not the only one. This is especially effective if they have contact with an older, more experienced gymnast who has successfully overcome similar problems with blocking.

10) Do the "blocked skill" early in the workout to avoid destroying the entire workout. If the gymnast is successful, they have a great beginning for the training session. If they are not successful, the stressful situation is done for the day and they can enjoy and focus on other aspects of their workout rather than dreading what is still to come.

11) Permit the gymnast to attempt the skill "out of

the limelight." For example, they may be encouraged to arrive at practice a few minutes early or to stay for a few minutes after (before is better to avoid prolonging the anticipation throughout practice). Practice the skill away from teammates to minimize the embarrassment that accompanies public failures.

12) Encourage the gymnast to explore the skill while at play or in a safe setting such as with a spotting belt or on a mat on the trampoline where the additional spring makes the skill easier. This approach also removes the skill from the primary situation where the negative emotions have been conditioned over and over again. Performing a high leaping back handspring, for example, may allow the gymnast to see visual spots more easily. This technique increases awareness even though it may be done so at the expense of biomechanical efficiency – at least temporarily)

13) Permit the athlete to control the rate of progress through the progressions for the skill. This approach requires a commitment on the part of the gymnast to approach the skill rather than simply delaying or avoiding the skill. Knowing that I can decide when I move on in the progressions can reduce some of the external pressure on the gymnast. However, this approach requires a significant degree of maturity on the part of the gymnast.

14) Encourage the gymnast to develop an awareness of appropriate visual cues (known as visual spotting) during the performance of the skill. Frequently, young gymnasts learn the skill so quickly, that they rely primarily on kinesthetic cues rather than visual cues. Initially, adding visual cues can be very distracting for a gymnast who has relied solely on kinesthetic awareness (not infrequently, younger gymnasts actually perform the skill with their eyes closed).

15) Analyze the skill for the possibility of subtle changes in the biomechanics of the skill that might occur because of developmental changes such as growth related to longer arms and legs, changes in center of gravity, reduced strength to weight ratios, etc. A common example: The hand placement while performing a back handspring on beam changes as the gymnast's hands increase in size as a result of growth. Initially, the hands can be placed side-by-side on the 10-centimeter wide beam. At older ages, the hands may have to be placed in parallel to the length of the beam creating subtle changes in the alignment of the gymnast's shoulders and torso, especially with strong gymnasts who have limited shoulder flexibility. The same growth process may

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change foot placements in a series of back handsprings.

16) Design the gymnast's optional routines to eliminate the blocked skill. While such an approach is extreme and not always possible if the skill is a required element of compulsory routines, at the advanced levels the sport of gymnastics permits and even encourages individualized choreographing of routines. Since blocking sometimes "comes and goes," the gymnast can even perform a routine in which the blocked skill will be included or excluded at will without sacrificing the integrity of the composition of the gymnast's overall floor exercise, uneven bars or balance beam composition.

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