

Sport Science

Psychological Strategies Used by Competitive Gymnasts to Overcome the Fear of Injury

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The competitive sport of women's gymnastics can be mentally and physically demanding on an athlete. The difficulty of the skills being performed and the high intensity of training for higher level athletes denotes the risk being taken by the gymnast and the rise of injuries in the sport (Caine, Lindner, Mandelbaum, and Sands, 1996; Kerr and Minden, 1988). This perception of risk and incidence of injury understandably can lead to a gymnast's fear of being injured while competing and/or learning a new skill. Fear of injury can produce detrimental influences on a gymnast's performance and self-confidence in gymnastics. Sport psychology research has also found that fear of injury is a common source of worry and a possible reason for leaving competition among young gymnasts (Duda, 1995; Duda and Gano-Overway, 19986; Klint and Weiss, 1986; Weiss, Weise, and Klint, 1989).

The fear of injury exists when a gymnast lacks confidence in her ability to perform successfully in a threatening or taxing situation. In order to perform at high competitive levels, one must learn to exercise control over fearful situations. We believe gymnasts need to adopt self-enhancing perspectives rather than self-defeating ones in order to overcome the fear of injury. This process can be enhanced by adopting psychological strategies such as thought stopping, imagery/relaxation, and positive self-talk. When using these approaches, that athlete learns to focus on relevant information, such as, feeling relaxed and giving her best, rather than worrying about the possibility of being injured. Not only do these strategies improve concentration, but they may permit the athlete to gain control over her fears and increase her self-confidence towards performing difficult skills. These strategies have been shown to be effective in performance enhancement programs (Orlick, 1986) and can be developed in young children and adolescents (Weiss, 1991). The purpose of this article is to present various types of psychological strategies used by age group program gymnasts, in a competitive gymnastics club, to overcome their fear of being injured.

Method

The participants interviewed for this article were eleven female competitive gymnasts, ages eight to seventeen years (mean age 12.3 years) from a single gymnastics club. This particular group of gymnasts trained 4 to 6 days per week and competed at the USA Gymnastics Junior Olympic Program Levels 5 through 10. All of the gymnasts had participated in a performance enhancement educational program with exposure to psychological skills training for one to four years.

Each gymnast was independently interviewed by one of the authors. The interview consisted of questions designed to assess the strategies used by the gymnast to overcome her fear of injury. Their responses or quotes were coded into common categories to determine the different types of strategies typically used (Scanlan, Stein, and Ravizza, 1989). Once the common strategies were derived, a frequency of the strategies were calculated.

Results

The results revealed that the gymnasts used a variety of psychological strategies to overcome their fears of being injured. All of the gymnasts reported they felt comfortable using some form of mental strategy to gain control over fearful situations the two most popular strategies used were “Just Go For It” and “Superstitions.” The strategy “Just Go For It” is a thought stopping technique used by the gymnasts to prevent rumination over negative thoughts of being injured. Thought-stopping is when the athlete makes a conscious effort to block out negative thoughts such as “I’m scared” or “I can’t do this.” Once the athlete has learned to block out negative thoughts, she can replace them with thoughts such as “just do it” and put her body into autopilot to attempt the skill.

Contrasting from the mental strategy of thought stopping, “Superstitions” are based more on the concept of luck. When a gymnast has a superstition, she is relying on certain objects such as a leotard or hair ribbon/scrunchy to bring her positive results in her performance. Superstitions are not a reliable strategy because the athlete is not in direct control of the outcome, however they do put the athlete in a positive mind set to perform. Superstitions when used as more of a routine, for example eating pancakes every morning, can help the athlete stay focused and relaxed.

The third most popular strategy used by these gymnasts reveals the significance of the coach in helping the gymnast overcome the fear of injury. The athletes look to their coaches and trust in their coach’s decision that they are capable of performing new or difficult skills. Without this support, the gymnast may begin to question her ability and continue to be fearful of injury and hesitate on certain skills.

The four remaining strategies are self-regulatory techniques that the gymnasts practice and use on a regular basis. “Imagery” allows the gymnast to visualize past and/or future experiences in her mind to prepare herself for how to handle fearful situations. This strategy improves the athletes self-confidence by making her more familiar with the skill. “Positive self-talk” is a strategy used by gymnasts to replace negative thoughts with positive ones. Rather than just blocking out fearful thoughts, the gymnast can prevent them from occurring by constantly using positive thoughts that she finds personally meaningful, (such as “I can do this”). “Selective focus and illusion” is a technique the gymnast uses to convince herself that either someone is there to spot her or that she has already performed the skill successfully. By using this form of illusion, the gymnast is creating an environment that is favorable to a successful outcome. Finally, “progressive muscle relaxation” is an effective self-regulatory strategy that teaches the athlete to control her physiological arousal during fearful situations. A relaxed state is best accomplished by using proper breathing techniques (such as taking deep breaths), which help to release muscle tension in the body. The athlete uses relaxation to control her physical responses in fearful situations and regain her composure and self-confidence. The strategies are presented in Table 1 with the percentage of responses for each strategy, followed by an example of a supporting quote.

Discussion

Based on these findings, it seems that if a gymnast wants to overcome the fear of being injured, it would be beneficial if she learned how to use psychological skills. Psychological skills training is an educational program designed to develop cognitive strategies in combination with physical skill development to enhance gymnastics performance and one’s overall experience in the sport (Weiss, 1991). Three basic strategies that are a foundation of a solid psychological skills program are relaxation, imagery, and positive self-talk.

The finding from this study also revealed that coaches play an integral role in helping the gymnasts overcome their fears of being injured. The girls in this gym club trusted their coaches a great deal, especially when attempting a new skill or one with high difficulty. The coaches support goes beyond the physical presence of spotting the gymnasts to help them advance physically in the level of difficulty of a skill. They also help the gymnasts mentally, and assist them in overcoming mental barriers such as fear of injury. Therefore, coaches need to be accurate in their feedback and judgment of the gymnasts abilities to progress to the higher levels.

Based on these responses, it is apparent the gymnasts in this study exposed to such training used the subsequent skills to combat their fears of being injured. In order to decrease the fear of injury, both the athlete and coach must work together to incorporate psychological skills training into everyday training regimens. The significance of the coaches role also needs to be emphasized during practice and competition to help the gymnast overcome adversity.

Table 1

Psychological Strategies Used to Overcome Fear

Thought-Stopping “Just Go For It” (19%)	<p>“I would just go for it, just throw it.”</p> <p>“So get it in your head that you can do this skill and just block everything else out of your head and just go for it.”</p> <p>“Take it one thing at a time. Don’t think about it. Block it out like a zombie.”</p>
Superstitions (19%)	<p>“I have my lucky underwear, my lucky socks, my lucky hair ties, my lucky hair clips. I eat French toast every morning.”</p> <p>“A lucky leo. Because every time I wear it, I’m lucky and I can do something.”</p>
Trust, Advice, and Support from Coaches (17%)	<p>“I’ve learned to trust the coach personally.”</p> <p>“Coaches always say, ‘I wouldn’t have you do it if you couldn’t do it.’ They believe in you.”</p>
Imagery (13.5%)	<p>“I think imagery can help because you get more familiar with the skill if you’re good at it.”</p> <p>“Imagery helps me a lot. I do it all the time. I do it outside the gym and in the gym.”</p> <p>“I use imagery. Like if I’m at a meet or if I am doing a skill I’ve never done before, I can just imagine myself doing it.”</p>
Self-Talk, Positive Thoughts (13.5%)	<p>“Thinking it and saying it to yourself, that I can do it, the coaches think I can.”</p>

“I try to calm myself down and say, Whoa wait a second, you’ve done this before.”

“I like say something in my head and it makes me do it.”

Selective Focus and Attention (10%)

“I pretend like the coach is standing there spotting me.”

“I pretend like I was on my third one. Like I’d already done three, I just think I’ve already done it.”

Relaxation (8%)

“I’ve learned the relaxation thing.”

“The relaxation stuff helps a lot too.”

“The relaxation thing helps a little too. If I’m relaxed there’s a better chance I won’t get hurt.”

References

Caine, D.J., Caine, C.J., and Linder, K.J. (1996). *Epidemiology of Sport Injuries*. Champaign, IL: Human Kinetics.

Duda, J.L. (1995). Level of competitive trait anxiety and sources of stress among members of the 1993 TOP Team. *Technique*, 16, 10-13.

Duda, J.L. and Gano-Overway, L. (1996). Anxiety in elite young gymnasts. Part II – Sources of stress. *Technique*, 16, 4-5.

Kerr, G., and Minden, H. (1988). Psychological factors related to the occurrence of athletic injuries. *Journal of Sport and Exercise Psychology*, 10, 167-173.

Klint, K.A., and Weiss, M.R. (1986). Dropping in and dropping out: Participation motives of current and former youth gymnasts. *Canadian Journal of Applied Sport Sciences*, 11, 106-114.

Orlick, T. (1986). *Psyching for Sport: Mental Training for Athletes*. Champaign, IL: Human Kinetics.

Scanlan, T.K., Stein, G.L., and Ravizza, K. (1989). An in-depth study of former elite figure skaters: II. Sources of enjoyment. *Journal of Sport and Exercise Psychology*, 11, 65-83.

Weiss, M.R., Weise, D.M., and Klint, K.A. (1989). Head over heels with success: The relationship between self-efficacy and performance in competitive youth gymnastics. *Journal of Sport and Exercise Psychology*, 11, 444-451.

Weiss, M.R. (1991). Psychological skill development in children and adolescents. *The Sport Psychologist*, 5, 335-354.

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