THE IDEAL PERFORMANCE STATE

by
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Increasing evidence is being accumulated linking specific states of psychological feelings of athletes during competition with quality of performance. Descriptions by performing athletes of the feeling states that accompany their best performances show a remarkable level of consistency. Similarly, when athletes are asked to characterize the nature and dimension of their internal world during poor performances, a similar pattern of consistency is evidenced. Understanding how various feeling states impact performance levels and, specifically, the exact nature of those feelings which are positively related to high level performance could be of considerable value in the psychological training of athletes. Further, the more clarity and understanding both coaches and athletes have concerning the characteristics of an ideal emotional climate for competition, the more directly they can devise specific training strategies to achieve it.

The relationship between high level performance and accompanying psychological states has received some attention by Maslow (1962, 1971), Ravizza (1975, 1977), and Csikszentmihalyi (1979). A summary of their descriptions of what might be referred to as an ideal psychological climate for performing is provided in Table 1.

Systematic Investigation

In an effort to more closely link psychological feeling states of athletes with performance output, an initial sample of forty-three professional and amateur athletes were selected across seven different sports. Athletes were asked to rate the level of their play immediately following a performance and then were asked to describe in writing and in as much detail as possible what their internal psychological experience was like during the performance. A second strategy was to have performing athletes recall from memory their “finest hour” as a player and then to describe in writing what their internal psychological experience was like during that performance. They were then asked to do exactly the same thing for their “worst hour.”

Once the material had been collected, correlations were made between the words the athletes used to describe their internal experience, and whether the performance was, in their judgement, a good or bad one.

Over and over again, the same words consistently reappeared when the athletes attempted to describe what was occurring internally when they performed well. The same was true for poor performances. When
### TABLE 1. HIGH LEVEL PERFORMANCE vs ACCOMPANYING PSYCHOLOGICAL STATE

<table>
<thead>
<tr>
<th>Maslow</th>
<th>Ravizza</th>
<th>Csikszentmihalyi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeling of mind and body integration</td>
<td>Absence of fear</td>
<td>Execution feels right and easy</td>
</tr>
<tr>
<td>Feeling of peak power</td>
<td>Feeling of effortlessness</td>
<td>Experienced as enjoyable and fun</td>
</tr>
<tr>
<td>Here and now focus</td>
<td>Feeling of complete control</td>
<td>Union of action and awareness</td>
</tr>
<tr>
<td>Freedom from inhibitions</td>
<td>Automatic execution of physical</td>
<td>Feeling of being focused in the present — not past or future</td>
</tr>
<tr>
<td>Spontaneous</td>
<td>skills (without thought)</td>
<td>Movement appears to occur by itself, purely automatic</td>
</tr>
<tr>
<td>Freedom from past thoughts or worries</td>
<td>Feeling of being totally immersed in the experience</td>
<td></td>
</tr>
<tr>
<td>Feeling of Effortlessness</td>
<td>Feeling of self-validation and perfection of the sport experience</td>
<td></td>
</tr>
<tr>
<td>Feeling creative and expressive</td>
<td>Temporary</td>
<td>Intense awareness</td>
</tr>
</tbody>
</table>

### FIGURE 1. Two Dimensional Concept of Energy and Feeling States

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High Energy

HIGH ENERGY POSITIVE FEELINGS  HIGH ENERGY NEGATIVE FEELINGS

A                  B
Pleasant Feelings  Unpleasant Feelings

C                  D
LOW ENERGY POSITIVE FEELINGS  LOW ENERGY NEGATIVE FEELINGS

Low Energy
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Cell A was labelled High Energy Positive Feelings (High indicating high intensity and positive indicating pleasant), Cell B — High Energy Negative Feelings (high intensity and unpleasant), Cell C — Low Energy Positive Feelings (low intensity and pleasant), and Cell D — Low Energy Negative Feelings (low intensity and unpleasant).

### FIGURE 2. Adjectives Describing the Interaction of Energy and Feelings

Of real significance was the observation that other critical feeling states consistently surfaced in combination with a particular energy cell.

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High Energy

Nervous  Fearful  Anxious  Angry  Frustrated  Upset  Vengeful

Alert  Energetic  Lively  Stimulated  Vigorous  Enthused  High Team Spirit

Pleasant Feelings  Unpleasant Feelings

Tired  Fatigued  Weary  Exhausted  Out of Gas  Low Desire

Low Energy

Bored  Disinterested  Annoyed  Irritated  Seriously Lacking Motivation
```
recalling poor performances, athletes consistently selected descriptive words which were opposite to those used to describe their best performance.

The following is a representative composite of the internal climate most commonly experienced by athletes during an outstanding performance.

"I felt physically very relaxed, but really energized and pumped-up. I experienced virtually no anxiety or fear and the whole experience was very enjoyable. I experienced a very real sense of calmness and quiet inside, and everything just seemed to flow automatically. I really didn't have to think about what I was supposed to do; it just seemed to happen naturally. Even though I was really hustling, it was all very effortless. I always seemed to have enough time and energy and rarely felt rushed - almost at times as if I were performing in slow motion. I felt like I could do almost anything, as if I were in complete control. I really felt confident and positive. It also seemed really easy to concentrate. I was totally tuned in to what I was doing. I was also super-aware of everything but distracted by nothing. It almost seemed like I knew what was going to happen before it actually did."

Systematic analysis of all the data collected provided considerable support for the following statements:

1. An athlete's level of performance is a direct reflection of the way he/she feels inside.

2. When an athlete feels right, he/she can perform right.

3. Performing toward the upper range of one's potential is a natural consequence of the right kind of internal feeling occurring at the right time.

4. An ideal internal psychological climate exists for every athlete (Ideal Performance State).

5. The component elements of the Ideal Performance State are fundamentally the same for all athletes and across all sports.

6. The Ideal Performance State is currently most accurately described in terms of specific feeling states experienced by the individual performer.

7. Competitive toughness is essentially the ability to create and sustain the Ideal Performance State regardless of the circumstances of play.

A Closer Look

From the analysis of several hundred reports of performing athletes, a total of twelve distinct feeling categories emerged which could be consistently considered reflective of the ideal internal feeling climate for performing optimally. These twelve categories are as follows:

1. Physically Relaxed

There is a characteristic feeling of looseness in the muscles that is associated with athletes' best performances. The feeling of nervous muscle tension correlated highly with low level performance. According to the data, the feeling of muscle relaxation and looseness is closely linked to a top performance.

2. Mentally Calm

This feeling component surfaced as one of the two most important of the twelve. Over and over again, athletes reported that their best performances were accompanied by a characteristic sense of inner calmness and quiet. The feeling of calmness was often accompanied by the feeling that time slowed down and things were occurring in slow motion. The connection between mental calmness and concentration was very evident in the data. A racy, fast mental state was clearly associated with concentration problems.

3. Low Anxiety

The results were clear. The more an athlete felt pressure during play, the poorer the performance was likely to be. Contrary to some earlier research findings, this research clearly indicated that the feeling of anxiety undermines performance and, the more the anxiety, the more probable the disruption. According to the data, for an athlete to perform optimally, the potentially difficult or challenging competitive situations must be taken and made pressure free.

4. Energized

Together with calmness, feeling positively energized during performance surfaced as being number one in importance. The source of the energy was not anxiety, fear, anger or frustration. On the contrary, the one word that seemed to capture the energy experiences best, as described by the athletes themselves, was JOY. Feelings of enjoyment, challenge, determination, power and intensity were often part of the energy experience.

Ironically, the ideal internal climate for performing is characterized by high level energy intensity accompanied by a profound sense of inner calmness, a most unique and intriguing combination.
5. Optimistic

The data clearly indicated that peak performance does not occur when athletes are feeling pessimistic or negative about themselves, their performance, or the situation. The importance of feeling positive and optimistic to performing well is no myth. Successful high level athletes understand this very well.

6. Enjoyment

Having fun and enjoying oneself within the competitive arena seemed to be an essential key to staying relaxed and calm, controlling anxiety, and sustaining positive energy. The statement, “When you can enjoy, you can perform,” seemed to fit the data.

7. Effortless

When the mind and body are working in harmony with each other, performing takes on an effortless feeling. Even though the athlete is still giving 100% to the task, it suddenly seems easier.

8. Automatic

Over and over again, the results were the same. Athletes' best performances occurred when they had the feeling of turning on the automatic, or essentially playing by instinct. Logical and analytical thought processing, particularly regarding form and technique, seemed to be suspended. In its place, a much more spontaneous, free-floating and instinctive processing materialized.
9. Alert
Another way of saying it is heightened awareness. Athletes’ best performances invariably were accompanied by a sense of extraordinary awareness. They reported that although not distracted, they became acutely aware of their own bodies, the positions of players around them, of who was likely to react in what way, and of where they were and what they were doing. The ability to anticipate correctly, to read what was about to happen, and to respond intelligently to the “present” appeared directly related to this heightened state of awareness.

10. Mentally Focused in Present
When athletes were performing well, they not surprisingly experienced a feeling of being mentally focused and tuned-in. Attending to the relevant aspects of play and blocking out the irrelevant seemed to occur almost automatically. According to the data collected, attentional control stems largely from the right mixture of calmness and high positive energy.

11. Self-Confident
Performing to the upper limits of an athlete’s skill and talent was closely linked to the athlete’s inner belief of being a good performer, having the potential for success, and having what it takes to perform well. The feeling of self-confidence appears to be one of the most crucial variables that determines whether an athlete can successfully transform potentially threatening situations into challenges while remaining calm and poised in adversity.

12. In Control
Performing well was invariably associated with the feeling that the athlete was in control and that he or she was controlling the situation, rather than being controlled by the situation. There was a characteristic feeling that the locus of control came from within. The feeling was often described as combining inner strength and high self-control.

Why Are Specific Feeling States so Important?
Feelings and emotions create energy and force. Feelings and emotions trigger psychological arousal, and the right combination of feelings produces the kind of physiological arousal that contributes to high level performance. The data clearly indicated that the activation and arousal patterns stimulated by feelings of anger, frustration, fear or anxiety have dramatically different performance consequences than feelings of challenge, inspiration, enjoyment or power. In actuality, when a performer is able to successfully sustain an ideal emotional climate during play, an insulating effect occurs against the biological “fight or flight” alarm response that generally produces tight muscles, a racy, fast mental state, and tunnel vision (narrow focus of attention). Feelings of confidence, calmness, lack of pressure, positive outlook, and high energy produce an activation pattern that clearly facilitates the expression of talent and skill.

Attempting to perform well in the presence of the wrong emotional climate is in many ways analogous to planting a seed in frozen soil. The potential of the seed cannot manifest itself until the conditions of temperature, moisture, and so on are optimal.

The Ideal Performance State and Positive Energy
Athletes consistently reported the feeling of being energized during their best performances. They used words like “pumped,” “psyched,” “wired,” and “jazzed” to describe the energy experience. Analysis of the descriptive accounts revealed a two dimensional conceptualization. One dimension concerned the level of intensity of the energy and the other concerned the extent to which the energy experience was pleasant or unpleasant. According to the reports of performing athletes, their best performances occur in the presence of high intensity energy that is highly enjoyable.

Energy states can be characterized on a continuum of intensity from high to low (see Figure 1). An athlete can feel high intensity energy, moderate intensity energy, or virtually no energy at all. Similarly, feelings can be characterized on a continuum according to their pleasantness versus unpleasantness. According to the reports of performing athletes, some states of high and low energy were very pleasant while others were very unpleasant. The data also suggested that this distinction may be crucial in accurately describing the ideal emotional climate for high level performance.

The two dimensional model described in Figure 1 emerged which provided four distinct cells.

As indicated in Figure 3, the High-Pleasant Cell was consistently paired with the feelings of relaxed muscles, calmness, and the feeling of being focused, tuned-in and in control. The data collected clearly indicated that some states of high intensity energy do not lead to over- arousal. Triggering the exaggerated “fight or flight” alarm response is not an inevitable consequence of high intensity energy. The crucial variable seemed to be the extent to which the energy experience was enjoyable and controllable.

The High-Unpleasant Cell correlated highly with feeling states that had emerged in the research as nonideal. Again and again, high levels of negative energy were associated with the feelings of tight muscles, a fast, accelerated mental state, and tunnel vision — a very rigid, inflexible and generally inappropriate kind of mental focus. The problem of over arousal was commonly associated with this cell (see Figure 3).

The Low-Pleasant Cell was consistently paired with feelings of relaxed muscles, calmness, but poor concentration and focus. Tunnel vision, however, was not the problem. Here the difficulty was one of being easily distracted. Athletes reported that they found their attention constantly wandering off to irrelevant things during play. It was only with considerable effort that they could keep themselves mentally on target (see Figure 3).

The Low-Unpleasant Cell (low intensity energy that was unpleasant) provided the greatest degree of unpredictability and inconsistency. Variable muscle tension and variable calmness were reported. A combination of tunnel vision and distractibility problems were common (see Figure 3).
Perhaps the most significant finding of all was that, of the fifty peak performances first examined all without exception, occurred in the High Energy Positive Feelings Cell. Not a single peak performance could be paired with any of the other cells. Subsequent analysis of peak performance experiences across seven different sports have resulted in similar findings.

Of particular interest also was the relationship of each cell to level of performance output. The probability of performing well was highest with the High-Energy Positive Feeling Energy Cell, third with the Low Energy Positive Feeling, and lowest with the Low Energy Negative Feeling Cell.

Perhaps not too surprisingly, the data indicated that moderate to high levels of negative energy were preferable to low levels of either positive or negative energy. Performing well requires energy and according to the data, negative energy is preferable to no energy at all. Of particular note, however, in the judgement of either the athlete himself or his coach, the best performance reported in a High-Negative Energy Cell was 60, slightly better than fifty percent of what was perceived to be that athlete’s performance potential. In other words, on his best day, an athlete may only be able to perform slightly above average if he experiences predominantly negative energy flow during the performance.

Performing to one’s limits, from all the data thus far accumulated, seems directly tied to the establishment of a highly unique and distinctive emotional climate, a climate that is characterized by high-positive energy flow. This high intensity energy is the energy associated with fun, enjoyment, and high self-motivation. When athletes love what they are doing, when they experience joy, optimism or challenge in play or practice, or when they find themselves experiencing high levels of team spirit, they are experiencing positive energy. The single emotion that best seemed to describe the high energy experience was JOY In fact, in a significant number of cases, athletes used the word joy to describe the energy feeling during peak performance.

Control is Largely Unconscious

The interviews repeatedly revealed that high level performing athletes are only vaguely aware of the existence of an ideal internal climate for performing. Rarely do they report an awareness that their best performances typically occur in the presence of a very specific psychological feeling state. Even though many of the athletes interviewed were considered particularly tough as competitors, there were often some very real misunderstandings about what constituted an ideal internal climate for performing.

An obvious question that could be raised is, “How do athletes control something they aren’t aware of and don’t understand?” And the answer simply is that the control appears largely subconscious. Not unlike the learning of complex motor skills, hours of competitive play and practice have led to the acquisition of specific psychological skills which enable the performer to control his/her Ideal Performance State during competition, for the most part unconsciously and automatically. The necessary mental skills are acquired essentially through trial and error learning. Athletes unconsciously practice muscle relaxation, mental calmness, positive energy flow, focusing attitude control and so on as they perform in competition. Controlling the Ideal Performance State becomes a natural consequence of time and practice in competition.

The “gifted” athletes seem to be able to perfect these techniques quickly on their own while most athletes need specific training techniques to accelerate their acquisition of these skills.

Accelerating Control

The successful competitor is one who has achieved substantial control of his Ideal Performance State during...
TABLE 3. Energy monitoring card

Name Salley Steers
Date 10-20-82
Time 11:00 a.m.

<table>
<thead>
<tr>
<th>Played Well</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Played Poorly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>High Energy</th>
<th>High Unpleasant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
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<td>3</td>
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<tr>
<td>9</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

Pleasant Feelings | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
Low Pleasant      |   |   |   |   | 6 |   |   |   |   |    |
Low Unpleasant    | 10|   |   |   |   |   |   |   |   |    |
Low Energy        | 10|   |   |   |   |   |   |   |   |    |

Comments:

competition. Any training procedure which accelerates the learning of such control could be of considerable value to both players and coaches. A variety of psychological training procedures are suggested using the Ideal Performance State construct as a central basis. Sample mental training strategies include the following:

1. **Awareness Training**

Any training strategies which help athletes make the connection between on-going feeling states and corresponding levels of performance could be very helpful. The sooner an athlete recognizes the critical relationship between feeling right and performing right, the sooner acceleration to achieving proper emotional control can be effected.

Increasing athletes' awareness and understanding of the specific elements of an ideal emotional climate for competition has also proved very useful. Athletes often make an inappropriate connection between such things as feeling high energy and a fast, accelerated mental state, or between good concentration and feeling anxious, between high energy and muscle tightness, or between verbalizing and visualizing during play. The following monitoring system has proved very useful in increasing athletes' awareness of feeling states during performances, as well as correcting misconceptions. Immediately following a performance, athletes are to rate the level of their performance on a scale of one to five, and then characterize how they felt during the performance, using the same rating system (see Table 2).

The feeling reported on the card simply represents an average of the overall feeling climate during the performance. If substantial changes occurred between first and second periods of play, between first or second sets, and so on, filling out separate cards for each segment would be useful.

A similar approach to monitoring energy flow can also be used. On a scale of one to ten athletes are asked to first rate their energy intensity level and then rate the pleasant versus unpleasant dimensions of the energy. They are then to plot their energy experience according to one of the four cells (see Table 3).

Again, more than one energy card may need to be completed if substantial changes occurred at different times during the performance.

2. **Emotional Rehearsal Training**

Having athletes rehearse the feeling climate that is associated with their best performances can be very useful in accelerating emotional control. Athletes can actually rehearse triggering high positive energy and calmness, high positive energy and muscle relaxation, positiveness, high confidence and so on. Once an athlete can visualize and/or simulate the circumstances of play for a future contest and simultaneously trigger the ideal emotional climate, the chances of establishing that proper climate during the actual performance is enhanced. Having an athlete vividly visualize their "finest hour" can be a powerful trigger for materializing the ideal emotional climate.

3. **Match Training Strategies to Ideal Performance State Deficiencies**

If an athlete consistently reports problems with tight muscles, progressive muscle relaxation exercises, stretching or yoga may be very helpful. Highly anxious
athletes may respond positively to autogenic training, thought control strategies or breath control training. Problems with high energy and calmness could be addressed with meditation or visualization training. Low energy during performances may be improved through increased physical fitness, improved diet or specific goal setting.

**Summary**

Performing toward the upper limits of one’s talent and skills or realizing one’s potential appears centrally related to the presence of a highly specific and distinctive emotional climate. Highly successful competitors have achieved substantial control over that ideal climate but the control is largely automatic and subconscious. The ideal climate for competition is characterized by a combination of specific feeling states which include high intensity energy, enjoyment, calmness, confidence, muscle relaxation and focus. Accelerating conscious control of the ideal emotional climate should result in improved competitive performance. Sample psychological training strategies were briefly reviewed for accelerating such control.

**References**


Murphy, Michael & White, Rhea. The psychic side of sports. Massachusetts: Addison-Wesley, 1978. (SIRC has this document GV 706.4 7455.)


Ravizza, K. Peak experiences in sport. Journal of Humanistic Psychology, 1977, 17, 35-41. (SIRC has this article #018673.)


NOTE: SIRC refers to the Sport Information Resource Centre which is a department of the Coaching Association of Canada. 333 River Road, Vanier, Ontario, K1L 8B9

**Suggested Readings**


2. Wilson, V.E. & Bird, E.I. Understanding self regulation training in sport. Sports Science Periodical on Research and Technology in Sport, October, 1982. (SIRC has this article #070521.)

3. Hall, E.G. Hemispheric dominance. Tapping the right brain in athletics. Sports Science Periodical on Research and Technology in Sport, July, 1981. (SIRC has this article #057151.)

**Recall & Insight**

1. In simple terms, under what conditions does peak performance occur?

2. What techniques should be initiated to demonstrate to the athlete the nature of peak performance?

3. Describe how you would use simulation to increase the chances of peak performance.

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