tech talk

Parallels in Sychological Factors in Technical Diving & the Olympics

Text by Matt Jevon Photos by Peter Symes

Achieving the Olympic dream is often described as the culmination of four years or more of hard work, sacrifice, commitment and dedication. To be an Olympian, there will be three components that must be present in each competitor before the dream can be achieved: talent, physical potential and psychological potential. Whether someone gets to "live the dream" is entirely dependent on whether they can maximise the three elements.

Surprisingly perhaps it is not the most talented that always succeed. In fact, an abundance of talent can actually work against the potential success as insufficient drive and effort is needed and thereby applied to realise a good level of success. When the last three percent is needed and its drive and commitment that will get them there, the highly talented are often found lacking to make the final step to the top of the tree.

For the competitors in Rio 2016, that medal was the rare and unique blend

of exactly the right amount of the necessary ingredients, properly prepared.

Sports science has added a considerable body of knowledge to the talent identification process and immeasurably to the physical preparation. Where it is really added value lately, though, is in

understanding the mind of the elite athlete. Unsurprisingly there is no one-size-fitsall profile, but certain characteristics are prevalent in all that do achieve "gold."

How can we apply these characteristics to what might be considered "elite' diving"—that is, cave, wreck and

mine exploration, deep mixed gas diving, etc? Well, you do need a certain amount of talent that will be developed and shaped by training and meaningful experience to manage the skills and planning that technical diving demands. You will need an appropriate level of

physical fitness—both to manage the gear and to have some spare capacity for managing the physiological reactions to psychological stress. What about the psychological side though? Let us look at each characteristic in turn.



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your diving? Does it have the same passion? If not. maybe the motivational foundation stone needs bedding in, or, that is just not who you are. Let us be realistic here, we are probably talking about people with the capacity to be in the top five percent in their chosen field of endeavour.

Foundations

Motivation. Defined as the direction and intensity of effort, no one is going anywhere unless they put in a little hard graft. But what will be the drive that gives sufficiently high levels of motivation? An intrinsic sense of self satisfaction of a job well done (task focus) or a boost to the self-esteem that the goal will bring (ego focus). For many elite athletes the fear of failure and the resultant damage to the self-esteem or ego is a massive driver. Thereby any and all effort goes into not failing or... winning. The truth, at the elite end, is that you will find people high in both high task and high ego. They may not be arrogant, a term often confused with a high ego, but they will have an unusually high internal motivational focus. Highly externally motivated people tend to lack consistency as the rewards of approbation, recognition and fame vary.

In divers it is the same. Many divers push through the certification levels to gain status in the eyes of their peers and them-

selves. They then give up, "goal" achieved—although maybe not much more than the highest level piece of plastic their chosen agency can provide. Others are in it for the long haul and it is these consistent high achievers who will share the same motivational traits as the Olympian.

I look upon motivation as a foundation stone. It can be improved

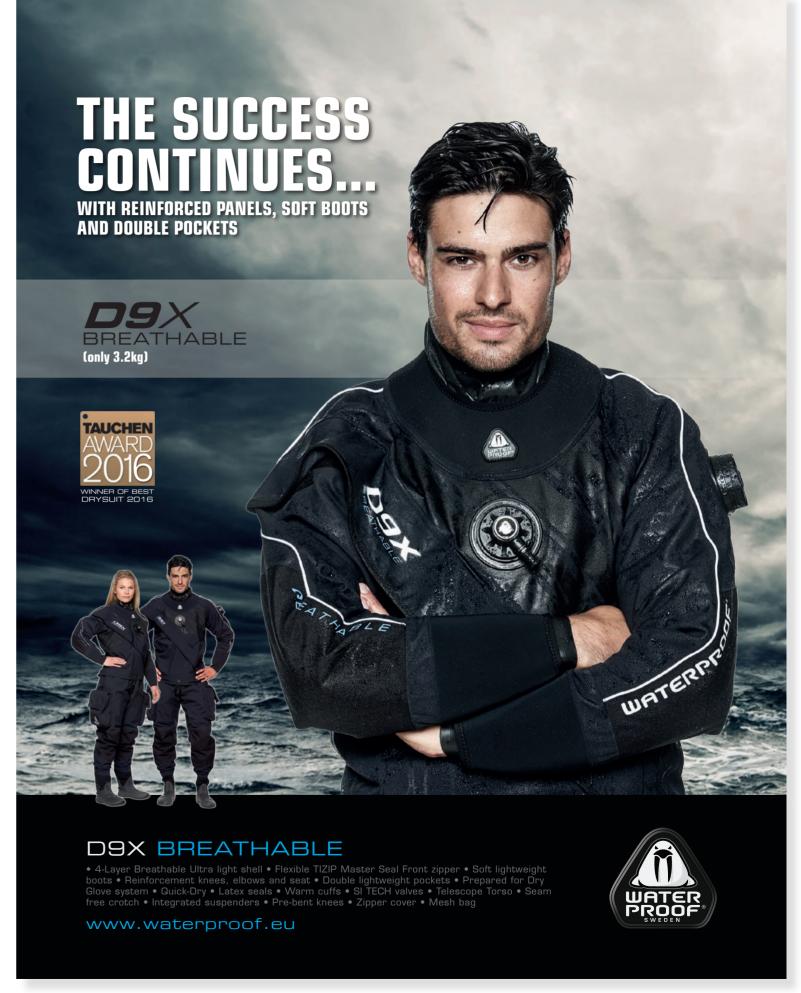
and made clearer or consistent, but, vou cannot teach someone to be motivated. You can only find out what it is, if anything, that motivates them and help structure their goals and actions accordingly. So ask yourself, do you have these

traits, in any area of your life? Is there something in life, career, relationships, sport or otherwise you have felt driven to achieve and have put in the effort and made the sacrifices required? If so,

Attitude and mindset. This, for me. is the second foundation stone of psychological approaches to elite sport or elite diving. Some people would have you believe it is all about being positive—having a winning mentality. I cannot really say, in my experience of working with elite athletes, that this is the case. Yes, some are

> amazinaly positive people, others, less so, but driven to "not lose" as opposed to win-welcoming the pain and suffering to prove to themselves, to that little voice inside them, that they can succeed. Winning to this mindset is a relief first and foremost. With both the positive or

"alternate" mindsets, what is common is a desire to leave no stone unturned, no detail overlooked no sacrifice is too great in the pursuit of success.



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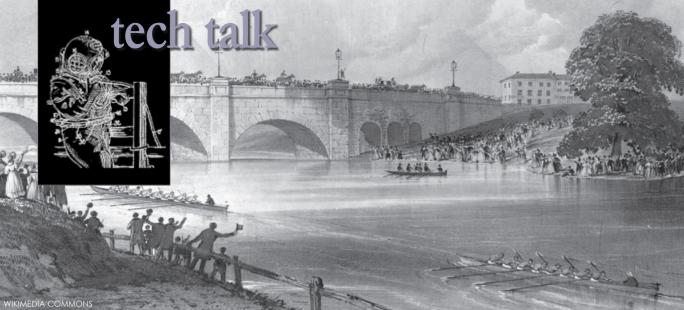
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Setting off in the 5,000m race at a full sprint will only end in tears. We see this in divers who progress very quickly only to push too far, too fast and if lucky, escape with a cold, hard introduction to reality.

Individuals, operating autonomously, can still be an effective team if they understand the roles and deliverables expected.

In diving, the team

mindset is seen as

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positive.



Some sports people will relish being part of a team, others, usually in ultra-endurance events, the does create a capacity areater individuality. As such, team work-

In any event, the attitude will and diver moving towards their setbacks and even regardless of early high achievement. For nasty slice. Carefully pushing the boundaries out, managing the risks and rewards against each other and keeping a consistent approach, are the traits that most often bring success in both environments. Setting off in the 5,000m race at a full sprint will

Unlike recreational diving, most tech agencies allow you to fail a student on a course on the basis of attitude alone, and rightly so.

pre-defined circumstances, and knowing exactly when not to interfere with others by stepping outside of agreed roles. Ideally, diving lends itself to the team approach, increasing situational awareness through teamwork and sharing this

ing skills, people and communica-

tion skills will be highly developed

in others. What is important is that

the person understands their role and how they relate to the envi-

they will train and perform. This is

not to say the individual eschews

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through excellent communication skills. The synergy of multiple brains than the sum of its parts.

be one that keeps the Olympian goal, regardless of obstacles and example, a golfer can be as distracted by a hole-in-one as by a

> only end in tears. We see this in divers who progress very quickly only to push too far, too fast and if lucky, escape with a cold. hard introduction to reality.

In technical diving, mindset and attitude is critical

Unlike recreational diving, most tech agencies allow you to fail a student on a course on the basis of attitude alone, and rightly so. Understanding and acceptance of both one's responsibilities to oneself and then to others is critical. Depth seekers for the sake of depth need not apply. Ego is not

a bad thina though. especially if internal and not reward-seekina. All too often, confused with arrogance and self-gratification, ego is a major driver for all high performers,

without exception (see my previous article on ego). If you work

with truly elite athletes, then you appreciate this is what has driven

> them to the Olympic gold medal. You can, trust me, have a massive ego and still be a kind and considerate person. Situational and self awareness. I quite

often teach a scanning technique based on three circles:

close, medium and long range. This is a structured way of checking on oneself and one's immediate environment in the close circle, on team mates in the

medium range environment, and in the next circle, scan what is happening in the dive boat or exiting diver, or what might be developing at a longer distance as well.







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Being able to stay aware in dynamic situations as both your own and your team mates interact with the stimuli and events allows

the first chance at responding appropriately to be made. Quickly and accurately recognising stressors and precursors to stressors aives more time for assessing one's own coping ability and benchmarking the stressor against previous training and experience. If there

(eustress) and it is likely to be met with confidence and a good solution. If there is a mismatch between the threat posed by the stress and perceived coping ability, then the first link of the error and accident chain is forged. In itself the first event does not have to be significant, but it will then shape future appraisals of the next stressor and

badly affect coping perception and decision making.

In team sports or versus competitors training and practice, compe-

> tition is designed to provide the stimuli and situations that both embed and test the expectations we have and the comparisons to existing patterns of memory. In this way, the "experienced" performer has an edge. They may lack fitness and certain skills, but their ability to predict and

is a match, then the stress is positive use embedded patterns of what is happening to determine the most effective response outweigh any deficiencies in VO2 max. This is undoubtedly true in diving.

Building blocks

Quickly and accurately

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own coping ability

Building blocks on the foundation are not just the mental skills mentioned below, but also, critically, the capacity and ability to execute

these mental skills in situations containing multiple stressors, significant valency that is a high relevance and consequence of success or failure (death or injury vs. fame or fortune). These skills include:

Imagery – of which visualisation is a part, but imagery includes the richness of all the senses (touch, taste, smell, hearing as well as seeing). It is also likely that imagery is best done for skill acquisition purposes internally—that is, you feel the mental rehearsal as a participant, not a spectator; you look out through your own eyes, you do not watch it on a TV screen. You can see this imagery occurring in Olympians before training and competition, in quiet moments. Perhaps the best examples are white water kayaks where you see them sitting on the bank, moving and even paddling the course, moving the whole body as if they were in the boat even though they are on dry land. In diving, I have noticed a trend of divers not only using visualisa-

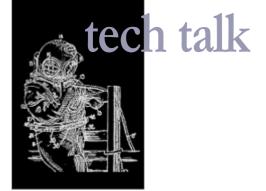




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tion, but also self-imagery, as if one is watching oneself on video. While useful, this is the weakest of the mental rehearsal techniques.

Cue identification and utilisation –

and what is important. This

Applying relevant filters to one's situational awareness, embedding appropriate cues or patterns to recognise it, stimulate prepared and practiced actions or responses—dismissing irrelevant cues in favour of what demands attention

demands significant robust embedding of patterns—that is, a full sensory experience of what will happen around you.

Fencers in the Olympics can predict the attacks and defences of their opponents before the moves are made. If a fencer could not do this, these moves are usually made so fast, the fencer would have

no effective response. The same is true in diving. An experienced instructor will see a student about to make

PREFLIGHT CHECKLIST

TURN CYLINDERS ON, CHECK MANUAL ADDITION VALVES,

CONFIRM ADV FUNCTION

PREBREATHE, VERIFY SET

CONFIRM BCD / DRY SUIT

DON / VERIFY OPERATIONAL

USE OF BAILOUT - CHECK

POINT, CHECK PO2

an error or struggle, and as such, engage in preventative or early interventions that arrest a more serious incident. This is where training, devised to expose

the athlete or diver to realistic and relevant cues, coupled with meaningful experience where one is

exposed to these cues, embeds the useful and genuine patterns. You might be able to do a 30-second shutdown, but if you are waiting for the instructor to signal with wetnotes or a hand signal, you may be too late, as you fail to recognise the bubbling behind you.

Pre-, in- and post-performance routines or scripts

- These routines or scripts provide a way of ensuring one is

in the optimum coanitive, emotional and behavioural "mood" for the dive. Whether you need to get "up for it" or relax into it, a solid pre-performance routine will help. Checklists often provide a reassuring discipline and form part of the routine for some people. The key is always the consistency of the routine, coupled with the discipline with which it is applied. Post-dive routines should encompass the debriefing and review—solving what went not so well and embedding the good, so it becomes

more consistent. Spend double the time on analysing what worked and why, as opposed to all your time

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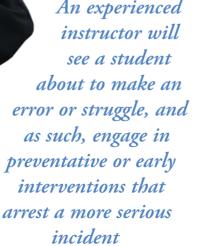
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on what did not work. In-dive routines can be very quick, a few milliseconds only, but do help to refocus a diver on what is relevant and important. Learn to have key points in the routine so you can step back to a known point and not have to start again from the beginning.

Arousal and anxiety recognition and management – We have all been told by someone to "calm down", or "take a chill pill", only for that comment to throw petrol on the smouldering bonfire. If we are to get control of our mental and physical arousal, and choose the most appropriate state for the task we face, then we must become sufficiently selfaware to recognise when we are too laid back, or conversely, over hyped and about to charge through the red mist. The use of pre- and in-performance routines can help with this, but recognising the triggers is essential, so that these routines can be implemented before things aet out of control.

The most usual and easiest trigger to spot is when you find yourself suppressing an emotion. Emotions have a purpose, and to be most effective and least distracting, they need to flow—to happen naturally. Love or hate, fear or joy, attempting a blocking of the emotion amps it up.

In the Olympics, there are a myriad of events that can trigger these responses and not just during the obvious pre- and in-competition periods. The Olympian is in a foreign country, there is heightened security, searches and long cues to get in and out of controlled spaces. Olympians endure confinement to the Olympic vil-

lage, temptations of unlimited food and are surrounded by equally young, fit people with associated temptations and distractions. Add in media attention and pressure, one's own country's expectations, sponsors and officialdom and it is a miracle anyone

copes at all.

In diving, we often discount many of the associated but not directly divingrelated stressors, such as travel, lack of sleep, required permits, boat rules and restrictions, etc. I know there is a tradiIn biathlon, the concentration required to ski down a technical slope versus climbing a hard and long section, and then at the end of either, being calm enough to place shots on target, is incredibly varied. The same is true in diving.

tion of early starts, which is fine when you have to catch a tide, and if you can still manage appropriate physical (i.e. sleep, food, hydration) and mental preparation, but should not be required just to meet some dive centre's schedule so the staff can have an afternoon off or fit in ten trydives. Do not dive in a sub-optimal physical and mental state.

Higher order psychological skills

Managing emotions in and away from training and competition requires a long time to develop, and for many, even those that win gold, is often out of reach. The trick is consistency—the more you are able to do this, the more consistent you will be in all of life's challenges, not only elite sport or diving. Choosing and being able to apply different types and intensities of concentration according to

the situation you face, is definitely a high level skill.

In biathlon, for example, the concentration required to ski down a technical slope versus climbing a hard and long section, and then at the end of either, being calm enough to put shots on target, is incredibly varied. The same is true in

diving. It is a challenge to avoid being drawn into a narrowing of concentration due to physical effort or task

loading. This included being able to switch to calm mode in order to work out responses to equipment failures or navigation. Other skills such as refocusing, utilis-

What is unknown

is the biggest

challenge

ing stress to generate positive outcomes and even distress, can be built on the foundations. The bigger your effective toolbox, the more likely you will have available (and select) a good or winning response to challenges.

Finally, whether your outlook is driven by a need to achieve or a need to avoid failure, it is understanding that in life, in training and in competition where you are prepared to go to "the dark and scary place", that what is unknown is the biggest challenge. It is where there will be physical, mental and emotional pain and discomfort. It is a hard place to be, at the limit of physical and mental capacity. But what is characteristic of consistent high performers is a willingness to go there, just about daily. You cannot experience the light until you have faced and beaten the dark.

A native of the Republic of Ireland, Matt Jevon, MSc., is an experienced and passionate open and closed circuit 100m trimix diver and full cave diver. Whether using backmount, sidemount or his favourite JJ-CCR rebreather, Jevon believes technical diving is all about being safe, having an awesome dive and enjoying experiences few people share. Jevon holds instructor qualifications from TDI, PADI TECREC and IANTD, and partly owns South West Tech—a TDI dive centre in Ireland. Jevon is also an approved JJ-CCR instructor and dealer. In addition. he is a sports psychologist, senior rugby coach and works in strategy and private equity. For more information, please visit: **Swt.ie** and **Mattievon.com**.

Dive Psychology



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