Competence to confidence a ritual of strengths

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Abstract

Veterinarians will face continuous challenges throughout their careers. Despite thousands of hours of professional training and experience, challenges will arise. In veterinary medicine these challenges range from diagnostic mysteries to complex business decisions. Inevitability, these events will result in failure to some degree. How the professional processes these challenges, confidence wise, will determine the level of competence they are able to apply to future problems and their career.

Professional athletes represent a similar model of trained and challenged professionals who can help veterinary professionals understand how to ease recovery and accelerate growth through a challenge. Athletes' use of regular rituals in training, preparation and recovery are an example of what veterinary professionals should seek to mimic. These rituals avoid accumulations of physiologic and psychologic stress; protecting the athlete's confidence in their own competence. This results in less stress on the individual, more motivation, and a higher degree of flourishing at their craft. Using the science of salutogenesis, we propose a "Ritual of Strengths" or an interventional model based upon providing the practitioner the skills necessary to respond in a near perfect way to these challenges; building confidence in their own competence. This model will allow high performing veterinary professionals to feel prepared for any challenge they come across.

Key words: salutogenesis, stress, imposter syndrome, strengths, confidence, neurobiology

Challenges to professional competence and confidence

At Operators to Owners, we study what it takes to make high performers. These are individuals who can operate constantly at a high level despite its associated challenges. As coaches, we often seek identifiable examples or models of high performance. Professional athletes face similar challenges and are a relatable model for many of our clients. As such, these athletes provide a readily comparable and identifiable model for veterinary professionals.

Similarities between veterinarians and professional athletes abound. Professional athletes have received thousands of hours of instruction and practice to elevate to their current level just as veterinarians have received thousands of hours of instruction and clinical practice experience. Both professionals must continuously learn and elevate their craft to stay relevant. Veterinary and professional athletes both face daily challenges to their professional confidence. They must both learn to conquer the extreme highs and lows associated with their craft.

Victories also pose unique challenges for this model. Becoming too confident after victory can mean embarrassing defeat or overconfidence in the next diagnosis. Likewise, victory can sap the drive or motivation needed for continued growth. Being able to have a replicable model or ritual that can recapture victory again and again is required for long-term high performance and the amplification of success.

Both veterinary professionals and professional athletes face a high degree of challenge. This may come in the form of injury, competitive challenges, loss and feelings of inadequacy. No matter their skill, they will both experience to some degree, loss or failure at some point. These "losses" are unavoidable. When we consider Conklin's findings that manual laborers make 5 to 7 errors per hour and knowledge workers make 15 to 20 errors per hour, we begin to understand why errors are a natural and expected part of daily labor.[1] Sometimes these errors will go unnoticed. A tipped pass, a missed diagnosis of inconsequence, an incorrect call, or a slip of words. Errors may have no effect whatsoever on the professional or they may be catastrophic.

Learning how to recover when these errors result in failure or when victory is finally realized is key for all high-performing professionals. By showing how professional athletes seek to overcome these challenges, we seek to create the framework for a model that young veterinary professionals can relate to and emulate in their own high-performing medical practice. To do this, the professional must first understand the processes that are eroding their confidence. The author proposes that veterinary medicine use sports psychology to begin to build our own model of "veterinary psychology" or what he calls the science of "High-Performance Veterinary Medicine".

A story of decaying confidence

Once a challenge, error or failure is realized, it is up to the professional to interpret the result. The individual's unique and ongoing internal story decides this interpretation. This inner story or "attribution" refers to the process of how individuals come to infer the causes of events or behaviors.[2] Attribution has strong influences upon emotions and feelings. It determines how individuals will relate to problems and people. Ideally, individuals tend to think of their failures as being due to temporary setbacks, externally controllable variables, and specific situations. This leads to positive attribution stories and allows them to move past their failures.

Positive attribution stories are more common among high-performing professionals. But we do see negative cycles as well, especially among younger professionals. Their internal stories suggest that their failure is a permanent state, controlled by who they are, and present in every situation.

One might think that you could avoid these negative internal stories. Keep your thinking positive and positive attribution stories will follow, right? Not so quick. Daniel Kahneman and Amos Tversky characterized an objection in their 1979 paper "Prospect Theory".[3] Their research found that humans feel loss to a greater degree than gain. We "value" the impact of an equal degree of success and failure at an unequal level. The positive effect of success is less impactful than the negative effect of the failure upon the individual. Meaning that, no matter how positive we try to see the win, it will never carry the same weight our failures do.

We can show professionals how this plays out with two specific questions. First, by asking, "What was your most recent loss or failure at work?". Next, ask them, "What was your most recent win or gain?". Almost every veterinarian can find a loss in half as much time as it takes for them to come up with a win. This is how "prospect theory" alters attribution stories and it is doubly as dangerous and detrimental to young professionals.

As young professionals grow into their careers, they tend to experience an increased imbalance between success and failure. This predisposes them to bouts of lost confidence and breeds a mind ripe for negative internal stories. These professionals also have a greater chance of manifesting "imposter syndrome," or the psychological experience of feeling like a phony, despite any success they achieve in an area of expertise.[4] This subsequent increase in negative self-talk elevates their baseline anxiety. This causes further depression of their career satisfaction and overall well-being. Couple this with a negative attribution cycle and you have an individual primed for a drop in confidence and performance. Professionals experiencing imposter syndrome may be unable to enjoy the victories they generate, believing them outside of their control. This further encourages their negative internal story and "justifies" it.

As if the deepening of this negative story wasn't bad enough, Cuncic suggests that imposter syndrome seems to manifest even more in young professionals.[4] This may exist because imposter syndrome appears to be more common when people are going through transitions and trying new things. The pressure to achieve and succeed, combined with a lack of experience, can trigger feelings of inadequacy in new roles and settings.

A common attribution story finds the professional in a series of negative experiences they believe is their direct fault and will follow them forever. This breaks an individual's confidence and feelings of control leading them to a state of "learned helplessness".

The onset of learned helplessness

Learned helplessness is, "The belief that a task or obstacle has an outcome that is outside [the] individuals' realm of control."[5] Discovered in 1967 by Martin Seligman, it describes how challenge can progressively destroy motivation until the individual no longer tries to improve their current situation and gives up.[6] The most famous example of this is the circus elephant.

As a 10-foot tall, 10,000-lb. animal, you would be thinking nothing could contain an elephant. Yet, circuses have infamously trained them to be restrained by something as simple as a wooden peg. As a baby, that elephant was tied to a similar peg that connected to a similar chain. Whenever the baby would attempt to pull away the chain would cut into the baby elephant's leg. After repeated attempts at escape, with pain, blood and futility realized, the elephant gives up. From that day forward it assumes it cannot escape this wooden peg. Physical surrender due to noxious stimuli such as the circus elephant experienced is the common model used to describe this phenomenon.

In people we can just as easily induce a helpless state by introducing an impossible knowledge-based problem to an individual. "Learned helplessness" can occur when you introduce an individual to an impossible task. If the impossibility of this task is not explained to them prior to their attempts at solving it, repeated exposure to this task with encouragement that it is easy and solvable, will eventually induce a state of doubt that erodes confidence until complete surrender is realize by the subject.

The author submits three examples of the use of impossible anagrams to induce learned helplessness from Starcke, Moll and Zooeygilr.[7,8,9] These are common examples of how easy it is to induce this helpless state. During these tests a series of anagrams, or words that can have their letters shifted in such a way to create new words from their composite letters, is presented to individuals. A control group is given solvable anagrams, usually of a very easy variety. While this group is attempting to solve these, the treatment group is given another set of anagrams. However, the treatment group's anagrams are unsolvable and contain no possibilities for new words. While the control group rapidly succeeds at the task, the treatment group is left wondering at their failure; crafting self-doubt and negative attribution stories. Ultimately, this results in frustration and eventual realization of the futility of their situation and eventual surrender due to the uncontrollable state induced from an impossible challenge, aka learned helplessness.

Given how anagram failure induces a learned helplessness state, it takes little extrapolation to realize that the daily challenges, errors or failures veterinary professionals experience could be interpreted as "impossible" problems and subsequently result in a similar state. All it would take is the right internal story, manifestation of imposter syndrome, or a lack of protective factors.

The implications of this state on early career professionals are expectedly detrimental. Science has already proven early career failures can induce a learned helplessness-like state. Bol showed that research professionals who "fail" early in their professional research cycles, by not winning a grant cycle, went on to receive significantly less cumulative funding.[10] This resulted in less scientific impact over their career. Bol postulated that this was due to a lack of cumulative resources as well as an unwillingness to risk failure again. In essence, the researchers had become "helpless" toward wanting to apply and potentially be rejected again.

Failures such as these have significant implications upon career trajectories, even upon young veterinary professionals. Additionally, they can even lead to higher levels of stress and unhealthy biological alterations within the professional.[11,12] This then has broad, indiscriminate and deleterious effects upon the neurophysiology of the individual. Further deteriorating their competence and confidence at a molecular level.

Neurologic checks and balances of stress

To truly understand fluctuating confidence, we must also understand stress responses and the associated neurobiological implications upon the professional. This requires the recollection of basic brain anatomy and endocrinology.[13]

Our brain contains 3 different regions that determine our current mental state. The first region, the brain stem, is associated with autonomic or autonomous inputs and outputs such as respiration, heart rate, visceral and somatic pain, as well as GI function. The second region is the limbic system, which is associated with stimuli processing, pituitary regulation, emotion, fight or flight, and empathy. The third region is the cortical system, it's associated with conscious thought, mindfulness, language and processing.

These 3 systems operate with a complex network of electrical and chemical checks and balances. In the case of ascending stressors, aka "bottom-up" stimuli, the limbic system can take electrical stimuli in from the brainstem in response to a stressor and create learned or habitual reactions to the stimuli. These

reactions are then sent to the cortex in the form of electrical and chemical (dopamine, norepinephrine, and glucocorticoids) responses. These chemicals then down regulate neural activity in the cortex, replacing conscious thought or processing in favor of evolutionarily advantageous habitual reactions. This is how we get a fight-or-flight response and begin to feel flustered or anxious when challenged.

Autonomous responses can similarly be controlled from the "top down" by the cortex. These responses can downregulate limbic system secretion of glucocorticoids and even alter the brainstem's autonomic signaling, allowing for conscious control of our most basic physiologic functions. The cortex can take-on "appropriate" levels of the stress responsive hormones dopamine and norepinephrine and use them to become "more awake". This results in improved neurological processing and stronger connections within the cortical matter. Creating a complex system of checks and balances that works great until the inciting stressor overcomes the cortex's ability to balance the limbic systems signaling.

Confidence induced stress physiology and the implications on competence

As an individual's confidence is challenged their attribution stories, impostor syndrome and failures trigger increasingly greater stress responses. These triggers lead to ever increasing limbic system signals until the cortex's cellular receptors, electrical, and chemical signaling pathways are overwhelmed.[14] Once this occurs it is only a matter of time until the limbic system predominates. Meaning a reactionary stress-based, fight-or-flight state takes over.

Most professionals that regularly lack confidence in their competence chronically live within this stress-based state. The result being that they often find themselves in a state of uncontrollable stress. The unfortunate reality of this state is not only their current state of anxiety or discomfort, but also the more chronic physiologic changes that occur due to it.

If the professional is repeatedly or continuously exposed to stress, chronic changes to their brain will begin to occur. Arnsten describes loss of cortical mass in individuals or the ability to connect neurons and ideas.[12] Subsequent losses reduce working memory within the cortex and degrade the pathways required for controlling limbic system obstruct input from the top down. Creating a vicious cycle that cumulates in even more stressful triggers and cognitive decline.

In the short term, professionals can expect lowered cognitive function and creative ability. But confidence-based stressor changes do not end there. Longer bouts of stress also cause prolonged glucocorticoid release from the limbic system.[14] This results in less brain-derived neurotropic factor in the cortex which controls neurogenesis, neuronal growth, maturation and metabolism.[15] Prolonged stress also increases neuronal development in the limbic system. Acting like a training muscle, this area of the brain rapidly overpowers cortical control. Remaining in this chronic state of stress leads to long-term detriments in neuronal balance and health. Ultimately, degrading critical thinking, creativity and high performance. Arnsten (2009) summarizes the impact of this degradation upon the modern professional well: The detrimental effects of stress on [cortical] networks are particularly problematic in the "information age," when [cortical] mediated abilities are increasingly needed for success.[12]

Many professionals may ignore these findings due to the classification of the stressors being "chronic". They mistakenly think themselves immune to the chronic nature of stress accumulation within veterinary medicine. They would be incorrect in this assumption. These changes can happen in as little as one week or even in as little as 3 unique stressful episodes.[12,16] This necessitates investigating the definition of acute stress and its classifications.

Ulrich-Lai and Herman define stress as actual or anticipated disruption of homeostasis due to an anticipated threat to well-being.[13] It is easy to understand that challenges to one's competence could be stress-inducing resulting in the described neurobiological changes. Elaborating upon this description, we can say acute stressors can come in 2 major variations, controllable mild stress and uncontrollable mild stress. These are separated by the individual's ability to feel in "control" of the stressor. This is the point at which learned helplessness and neurobiology intersect.

Individuals who feel out of control of their stressor are at an increased chance to experience impaired performance of higher level cortical (cognitive) functions.[11,12] Jung has shown that when stress increases the resultant emotional outputs from the limbic system it can erode our intelligence quotient (IQ) via a complex and less understood interaction between emotional management (or emotional intelligence: EQ) and IQ.[17] The end result being a lower functional IQ in the moment.

You now understand the cognitive implications of confidence erosion, the causation and impact of the emotional outputs it produces, and its associated stress response. To counteract this response, we must create a ritual that manipulates the professional's perception of acute stress. This intervention must occur in such a way that the professional can feel in control of the inciting factor(s). Additionally, research has also shown that this system must seek to improve the professional's emotional intelligence and craft a deeper understanding of oneself (also known as EQ or self-awareness, self-management, social awareness, and relationship management). This allows them to mitigate the IQ drain associated with stress induced behavioral change. Much like an athlete's performance may suffer due to "pregame jitters," challenges to veterinary confidence will erode even the most honed medical competencies. Therefore, it is critical that high-performing veterinary professionals have a ritual or routine by which they can overcome or reduce the effects of these challenges.

Stress-free confidence via a ritual of strengths

Crafting a single ritualistic plan for stress reduction, improved autonomous control, and emotional intelligence seems daunting. This is a big ask for any single intervention process. However, science already has a field dedicated to such a pursuit: salutogenesis.

Introduced by Aaron Antonovsky in 1979, salutogenesis seeks to study the states of health rather than disease.[18] Antonovsky wanted to study and define health as not a lack of a disease process but instead as a state of healthful flourishing beyond the "normal physiological and psychological baseline" of that individual. Rather than focus on pathogenesis of disease, he wanted to create a science that studied what he called general resistance resources (GRR's). The traits within individuals that allow them to respond and flourish when stressors occurred.

Antonovsky argued to achieve this state of flourishing individuals needed to mold these GRR's into something called a "sense of coherence" or the capacity to respond to stressful situations. He described this sense of coherence as having three unique elements, within which GRR's could be subgrouped. First, an element of comprehensibility or ability to understand the stimuli causing the stress. Second, an element of manageability or belief that they had the tools to manage the stressor. Third, an element of meaningfulness or the ability to see a stressor as a challenge rather than a burden. Using these 3 elements as interventional factors we can construct a simple yet broadly applicable intervention plan for creating and protecting professional high performance during stressful states.[18]

A sense of comprehensibility is the easiest to instill in potential high-performing professionals. When working with these individuals, comprehensibility relates to their ability to identify, understand, and process stressful stimuli. This might be a lack of competence, internal doubt, or a societal challenge to them from outside sources. It might be an imbalance in work or life. It could be interpersonal conflict. Or even financial friction. No matter the stressor, the first step is to get them to identify the problem and become ready to consciously address it. Setting them up to break the vicious cycle that was initiated by their stimulated limbic system.

Once the individual has grasped the stressful stimuli with clarity, we then establish a sense of manageability. This interventional area focuses upon addressing negative attributions, imposter syndrome and learned helplessness. This is where the author believes the true power of ritual comes in. By crafting a framework of repeatable ritual, much like an athlete with a pregame routine, we can return to this ritual over and over as new and evolving stressors occur.

To accomplish this, Operators to Owners seeks to use scientifically validated technologies for its "salutogenic interventions". As such, we lean heavily upon Peterson and Seligman's positive psychology research and their strengths-based approaches to problems.[6,19] This approach seeks to identify an individual's unique character strengths and leverage them to induce a state of flourishing. In crafting this ritual, we melded their clinical research-based approach with Gallup's StrengthsFinder 2.0 industry approach.[20] This allowed us to ask Donald Clifton's infamous question

"What would happen if we studied what is right with people?".

This seems like a fitting question to ask as we use an individual's unique talents to seek to understand salutogenesis and build "strength" and "resiliency". We have found that people can build and believe in self very quickly once they are presented with their strengths.

After taking the StrengthsFinder assessment, individuals get ranked on 34 unique talents they have. These talents are reflected upon and consciously employed to address challenges. Gallup calls this conscious application of talent an expression of strengths, thus we propose this intervention be called a "Ritual of Strengths".

But knowledge of talents is not enough. If we want to be able to control and build confidence, then we must also consciously apply the talent to make it a strength. Gallup has shown this critical step can make all the difference. Individuals who apply their talents in a conscious manor on a daily basis are 6 times more engaged at work, 8% more productive and 15% less likely to quit their jobs.[21] But even with these facts, only 17% of Americans are able to use their strengths at work on a daily basis.[22] Knowing these outcomes, managers and employees should seek to leverage strengths as a primary way to flourish at work as well as improve confidence.

To manifest this sense of manageability, we craft a framework where our talents become our strengths through conscious and intentional behavior. This is accomplished through a technique called Name It, Claim It and Aim It.

Using the clarity we achieved from comprehensibility, we understand the problem or stressor we are trying to overcome, and we write it down. Next, we "name it" or identify the unique talent we want to apply as a strength to the problem. The individual then "claims it" by citing the aspects of that strength they wish to apply to the situation. Finally, they craft a unique plan or "aim it" using that strengths skill set allowing them to conquer the stressor. Once applied several times, this process becomes an unconscious conditioned habit creating a new default pathway for addressing future novel stressors as well.

Antonovsky's final salutogenic intervention is meaningfulness. This requires the professional to tie the stressor to something meaningful to them. Tying the stressor to them creates a sense of controllability; adding control to a stressful situation eliminates feelings of learned helplessness. Additionally, it integrates the challenge into who they are or want to become. Crafting and instilling confidence as well as providing motivation for the identification and utilization of resources and connections to conquer it. Finally, making the process meaningful to them allows the internalizing of the problem, making it an intrinsically derived issue rather than externally summoned one which reinforces personal control over the situation.

When combined, these 3 interventional steps of comprehensibility, manageability and meaningfulness creates a Ritual of Strengths that builds confidence within the individual; allowing them to overcome and flourish over any future stressor. Ultimately resulting in the creation and maintenance of high-performing veterinary professionals.

Bringing it all together

Crafting an intervention where young professionals can rebuild confidence in their competence on their own is a difficult task. No singular intervention can account for all of the unique challenges, errors and failures a professional will encounter. It is the author's belief that the proposed strengths-based intervention, or Ritual of Strengths, can represent a cornerstone of in any veterinary professional's salutogenic toolbelt. It can propel the professional forward and open the door to other more unique professional development interventions as their career and challenges progress, ultimately resulting in a professional with less self-doubt and overall higher performance; helping our young colleagues manifest their own meaningful work upon the world, while maintaining confidence in their competence to better our profession long into the future.

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