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The life of meaning: a model of the positive contributions to well-being from veterinary work

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ABSTRACT
We present a veterinary model of work-derived well-being, and argue that educators should not only present a (potentially self-fulfilling) ‘stress management’ model of future wellness, but should balance this with a positive psychology-based approach depicting a veterinary career as a richly generative source of satisfaction and fulfillment. A review of known sources of satisfaction for veterinarians finds them to be based mostly in meaningful purpose, relationships, and personal growth. This positions veterinary well-being within the tradition of ‘eudaimonia’, an ancient concept of achieving one’s best possible self, and a term increasingly employed to describe well-being derived from living a life that is engaging, meaningful, and deeply fulfilling. The theory of eudaimonia and workplace well-being is explored, to inform development of the personal resources likely to foster resilience in undergraduate and graduate veterinarians.

Key words: well-being, job satisfaction, eudaimonia, positive psychology

INTRODUCTION
As veterinary educators, we spend much time and effort teaching undergraduates how to be veterinarians – but do we spend enough time teaching them why to be veterinarians? Traditionally, attempts at explaining the ‘why’ of veterinary medicine will cite societal common good, through service to animal welfare, the human-animal bond, inter-species ‘One Health’, or community leadership.¹ Many of these goals are implicit in accreditation or competence frameworks.²³ But these service to society models only
defer the question, with respect to individual motivation: why devote a life and career to the service of animals, their owners or society? What’s the intrinsic and personal reward for the veterinarian?

More worryingly, do we inadvertently teach our students too much about why not to be veterinarians? Increasing concerns about elevated risk of mental distress and suicide in veterinarians,4,6 and increased mental health risks in veterinary students,6-9 rightly dictate that these important issues should be proactively addressed in undergraduate programs. Preventative mental health strategies are typically enacted in veterinary curricula through professional ‘self-care’ programs, emphasizing approaches such as stress management, coping skills, mindfulness meditation, and work-life balance through hobbies and supportive relationships.10,11 But notwithstanding that these are all important interventions for individuals suffering from mental distress, there is a hidden risk that teaching such strategies to undergraduates models their future workplace as a one-way drain on well-being to be avoided in bad times, and a negative externality that must be counteracted by personal resources built elsewhere. This also risks unnecessarily demonising their future profession, ignoring the fact that many of the known stressors for veterinarians (e.g. long working hours) are generic to all professions, and are malleable through good working practices. Thus due to the power of human attention bias, excessive emphasis on preventative ‘self-care’ paradoxically risks fostering a negative work concept (Table 1) and sensitizing to mental distress and burnout.

[Table 1 near here]

The Positive Side of Veterinary Work

An overly negative emphasis also risks obscuring the truth that many veterinarians, while simultaneously reporting workplace stress, remain highly satisfied in their work and regard it of net benefit to their well-being. For example, a UK workforce survey found the overwhelming majority of veterinarians agreed with the statements ‘veterinary work is stressful’ (83%) and ‘veterinary work is enjoyable’ (93%).12 Similarly in Heath’s longitudinal studies most respondents felt that the positive factors of their veterinary experience outweighed the negative, and at 10 years post-graduation the majority (67%) agreed ‘my veterinary career is a major source of satisfaction in my life’.13,14 Job satisfaction is important to veterinarians’ well-being; in a New Zealand study overall job
satisfaction explained 8.2% of variance in mental health, while specific job factors explained 5.6%, and the interaction of these with non-job factors explained a further 6.6%. A Belgian study similarly found a high level of job engagement in veterinarians, with 95% reporting average or high level of engagement, while less than 4% did not feel stimulated at work. This high level of engagement apparently mitigated job strain, which was comparable to other professions, despite known stressors including long working hours.

This picture, of negative work aspects (stress) in equilibrium with counterbalancing positive aspects (satisfaction), is mirrored in several other models of work-related well-being that have been applied to veterinarians. ‘Compassion fatigue’ is a phenomenon of physical and emotional depletion recognized particularly in healthcare workers, which is ameliorated by the reciprocal experience of ‘compassion satisfaction’ (i.e. the sense of personal satisfaction and meaning derived from caring for others). In one study of frontline mental healthcare professionals, low compassion satisfaction was found to explain 28% of the variance in burnout. In a US study of these phenomena across animal care professions, 83% of veterinarians were found to have ‘good’ or higher levels of compassion satisfaction, partly explaining their low burnout despite high self-reported risk of compassion fatigue (so-called ‘bookend scores’). Another applicable model is the more expansive Job Demands-Resources model, which recognizes the competing influence of two broad categories of work characteristics (i.e. job demands and job resources). Using an extended version of this model to investigate Dutch veterinarians, Mastenbroek and co-workers found a central role for both job resources (opportunity for professional development, skills discretion) and personal resources (self-efficacy, reflective & proactive behavior) in maintaining work engagement and workplace performance, even in the face of exhaustion.

A focus on positive/generative contributions to life satisfaction and well-being is foundational to the relatively young science of positive psychology, which aims to understand how individuals and societies thrive and flourish, and how to promote human happiness and fulfillment. Thus while (by definition) positive psychology is explicitly not concerned with treating problems, it is nevertheless applicable to preventative interventions. For example Fredrickson’s Broaden-and-Build Theory shows that positive emotional experiences can have a long-lasting effect on personal growth and well-being,
through countering negative emotions; broadening attention, creativity, and open-mindedness; and building psychological and social resources that enhance ability to cope with future challenges. This buffering effect links positive psychology to the important and educationally-useful construct of resilience, defined as the ability to succeed, live, and develop in a positive way despite stress or adversity. It can be argued that mental resilience is the most important attribute for a veterinary graduate, on the basis that failure of this attribute carries the most severe potential consequences. Many tangible benefits flow from a positive approach to well-being, for example doctors experiencing positive emotions are more efficient and creative in their clinical decision-making, and optimistic people achieve greater sales in business. Bartram & Boniwell (2007) provide a concise summary of positive psychology for veterinarians and their employers.

WHAT SATISFIES VETERINARIANS?

Though not widely studied, available evidence of what motivates and satisfies veterinarians is largely consistent (Table 2). Most frequently cited factors include intellectual challenge and variety; helping clients; helping animals, in both the individual and collective sense; and positive interactions with work colleagues. Perhaps unsurprisingly, self and animal factors appear slightly (but only slightly) more important than human or relational (client/colleague) factors. Heath similarly distilled free-response data from his many graduate surveys to reveal the importance of “satisfaction gained from achieving a good result in a challenging professional situation, or from being able to communicate with, gain acceptance from and help, clients.” However in contrast to the 14% of UK veterinarians citing ‘status’ as important, Heath (2002) found that most veterinarians did not value their status relative to other professions. This perception is probably flawed, given that US market research commissioned for this purpose found that public opinion rates veterinarians very favourably against other occupations (including doctors, dentists, and teachers), particularly among pet owners. Similarly though financial reward was cited by a minority in two satisfaction surveys, other evidence broadly contradicts this. Large economic studies of the profession in the US have shown no correlation between job satisfaction and mean income, and that income is placed far behind other motivating factors. While experienced veterinarians generally have comparatively high (upper tertile) incomes, they (like most people) are inaccurate in
estimating income distribution, prone to social comparison (e.g. with doctors), and are only loosely satisfied by financial gain.

[Table 2 near here]

The factors satisfying veterinarians are generally similar to those motivating veterinary students, i.e. in their initial choice of career path. The choice of a veterinary career is made very early in life, an average age of 8.7 years in one French study, in which the words ‘animal’, ‘care’ and ‘passion’ were thematically identified as most strongly associated with the veterinary role. UK students rated the top attractions of the career as working with animals, rewarding job, varied job, practical job, and fulfilling job; similarly Austrian students ranked their major motivating factors as medical interest, love of animals, and desire to help/heal animals. In a US survey new graduates and students ranked their reasons for choosing the profession as (in descending order):

desire to work with and care for animals, interest in science and medicine, good stable career with steady work, desire to help people, honor and respect accorded to the veterinarian, desire to work outdoors, and income. With the obvious exception of the central role of animals (and perhaps higher daily task variety, e.g. surgery), these factors are also broadly similar to those motivating doctors and medical students. Medical students cite the top determinants of career satisfaction as: being a good communicator with patients, balanced life, involving patients in choices, professional or intellectual growth, and being in a career whose primary goal is service to humankind. In studies of hospital-based doctors, the greatest contributions to job satisfaction were good relationships with patients, having professional status/esteem, and intellectual stimulation, while the most important protective factor against burnout was favourable social relations with colleagues and patients.

The Eudaimonic Tradition

Analysis of the above sources of satisfaction shows them to be aligned principally with meaningful purpose (helping animals and others) and self-improvement, rather than with extrinsic or material reward. While satisfaction or ‘happiness’ is usually defined in the hedonic sense (i.e. as positive emotion), it is increasingly compared with the ancient concept of eudaimonia, which can be traced to Aristotle’s view that the highest human good is to realize one’s true human potential or inner ‘daimon’. The eudaimonic
tradition focuses on living a life that is fulfilling and deeply satisfying, and is more concerned with life content and process (‘living well’) rather than pleasurable outcomes.\textsuperscript{39,40} Thus ‘eudaimonia’, \textit{i.e.} the well-being experienced as the byproduct of living such a life, is difficult to define and has been variously synonymized as psychological well-being (\textit{c.f.} subjective well-being),\textsuperscript{41} self-validation,\textsuperscript{33} ‘authentic happiness’,\textsuperscript{42} personal expressiveness,\textsuperscript{43} meaningfulness,\textsuperscript{44} quality of life,\textsuperscript{39,41} or flourishing.\textsuperscript{45,46} While there is substantial overlap (and statistical correlation) between hedonia and eudaimonia, it is possible to discern important areas of divergence.

Responses correlated positively with meaningfulness but negatively with happiness include, for example, being a giver rather than a taker; thinking about past and future rather than the present; and (notably, in the veterinary context) perceived stress and anxiety.\textsuperscript{44} Eudaimonic well-being is also more stable and enduring than hedonic happiness, and is more clearly evaluated in long-term perspectives.\textsuperscript{33}

Various models of eudaimonia have been elaborated, partly hampered by the confusion of correlated inputs, processes, and outcomes of well-being.\textsuperscript{47} Ryff and colleagues (1989) defined six dimensions of Psychological Well-Being (PWB): self-acceptance, personal growth, relatedness, autonomy, relationships, environmental mastery, and purpose in life.\textsuperscript{41,48} This model has been challenged by Springer (2006) who argues that four of the six sub-scales are virtually indistinguishable, and only autonomy and relatedness should stand as separate dimensions of PWB.\textsuperscript{49} This brings it close to the model advanced by Ryan and Deci on the basis of their Self-Determination Theory,\textsuperscript{50} which views eudaimonic living as the pursuit of intrinsically-oriented goals in order to satisfy the basic needs of competence, relatedness and autonomy, which in turn mediate well-being. In this model a happy person is one who has achieved what is worth desiring, thus inferring reflection and evaluation against personal values or (internalized) societal ideals.\textsuperscript{33} This also implies mindfulness, \textit{i.e.} awareness of what is truly occurring and its congruence with the desired state. This reflective/mindful endorsement of the worthiness of one’s volitional goals and actions constitutes much of what is defined as \textit{autonomy} within Self-Determination Theory.\textsuperscript{51}

Waterman and coworkers invoked a number of eudaimonic dimensions as the basis for their well-being measure: self-discovery, development of one’s best potentials, sense of meaning and purpose, enjoyment of activities as personal expressive, investment of
effort in goal pursuit, and intense involvement in activities. These last two dimensions of effort and involvement parallel the *engagement* element of Seligman’s original ‘three roads’ well-being model (positive emotions, engagement, meaning). In a recent revision Seligman (2011) added two further elements: relationships (because relationships are fundamental to human well-being), and accomplishment (since achievement can be pursued purely for its own sake). This last dimension, of mastery and striving to be better, brings to mind theories of *competence* (Ryan & Deci) and *personal growth* (Ryff), and also the ideal of ‘self-actualisation’, the tip of Maslow’s famous hierarchical pyramid of needs. Self-actualisation is a rather vague concept, usually translated in the Western philosophy as fulfillment through attainment of personally meaningful goals. Waterman similarly viewed ‘personal expressiveness’ as a feeling derived from self-realization and fulfillment via development of one’s skills, advancement of one’s purpose in living, or both. This is close to Boniwell’s simplified view of the “broad umbrella” of eudaimonia, which distils this rather fuzzy concept to two central elements: personal growth, and transcendence – dedication or commitment transcending the personal for the sake of deeper meaning in life.

Notwithstanding much theoretical vagueness around the constructs of both well-being and eudaimonia, we contend that in the context of their professional work most veterinarians would naturally recognize ‘well-being’ as being founded much more in eudaimonia than hedonia. In doing so, they consciously invest much effort (and endure a certain amount of stress), in search of meaning, fulfillment, and social connection, rather than outright pleasure. This brings to mind Seligman’s contention that “… ‘happiness’ and ‘well-being’ sometimes refer to feelings, but sometimes refer to activities in which nothing at all is felt”. Thus we contend that in the veterinary context, eudaimonia may be the most useful definition or organising construct of work-related well-being, rather than positive emotion or (hedonic) happiness.

**Job characteristics**

Various models have been developed to assess the influence of job characteristics on employee outcomes, including satisfaction and well-being. It can be argued that the job of a veterinarian rates very favourably using such models, which show a recurrent emphasis on eudaimonically-oriented job elements (*i.e.* autonomy, intrinsic motivation, meaningfulness, social contact) thus implying a eudaimonic perspective. For example, of
Warr’s three key workplace characteristics (all of which are associated with happiness in the broader eudaimonic sense), veterinary work can theoretically be evaluated favourably against at least six: opportunity for personal control (decision latitude), opportunity for skill use [including learning], externally generated goals [challenges, problems to be solved], contact with others, variety, and valued social position [status and meaningfulness]. On only three characteristics would veterinary work possibly be evaluated negatively or neutrally: environmental clarity [unpredictability], physical security [occupational hazards, noise], and perhaps (self-assessed) financial reward. It also scores highly on the five dimensions of Hackman & Oldham’s Job Diagnostic Survey instrument: skill variety, task identity (start-to-finish involvement), task significance, autonomy, and (perhaps less so) feedback; under this construct veterinary work is a ‘broad’ job with high ‘motivating potential’.

A MODEL OF THE EUDAIMONIC VETERINARIAN

By combining sources of satisfaction with relevant models of work engagement and eudaimonia, it is possible to propose a model of how eudaimonic well-being might be achieved within a veterinary career, based primarily on Seligman’s PERMA model of well-being (positive emotion, engagement, relationships, meaning, accomplishment)\(^45\) (Figure 1). The notion of deriving broader well-being from varied challenges and the use of specialized skills, particularly surgery,\(^28\) particularly invokes Seligman’s\(^42\) concept of engagement as being derived principally from Csikszentmihalyi’s phenomenon of ‘flow’.\(^54\) Flow states occur when a task is sufficiently difficult but attainable, skills are equal to the challenge, and all are aligned with intrinsically-oriented motivation. These conditions facilitate a subjective experience of transcendence of self, of time stopping or racing by, or being ‘in the zone’. Since flow states are not necessarily pleasurable while experienced but are related to longer-term well-being, these align more closely with eudaimonia than with hedonia.\(^47\) Waterman found that for important activities, the balance of high challenges and high skills was consistently associated with both flow experiences, and the eudaimonic dimension of personal expressiveness.\(^55\) The positive clinical outcomes resulting from successfully meeting such challenges provide reward as
accomplishment, both in the narrower (achievement) sense, and more broadly as learning and personal growth. Mastenbroek’s application of the mixed Job Demands-Resources model to Dutch veterinarians found (in an endorsement of the ‘self-actualization’ concept) that the strongest predictors of work engagement were opportunities for professional development, and high freedom to use their skills.  

Feelings of well-being derived from caring for others lie firmly in the eudaimonic tradition, as highlighted by the general tendency for care-giving professions to be more prone to distress and emotional exhaustion (i.e. compassion fatigue). Nevertheless, evidence suggests the strong positive correlation between well-being and empathy is bidirectional, and that empathic concern for others increases life satisfaction, as has been shown for veterinarian satisfaction with problem visit consultations. Such feelings are presumably mediated through sense of meaning and purpose in life, which is closely correlated with psychological well-being. Some have suggested meaning in life may largely mediate the association between eudaimonic conceptions of well-being, and the subjective experience of well-being. Meaning is also a powerful factor in resilience, including reduced risk of suicidality. Similarly, people who view their work as a calling report significantly higher life and job satisfaction than those who describe it as merely a job or a career. 

For veterinarians, their care-giving role is split across both animals and humans, possibly explaining why veterinarians have shown better job satisfaction than other emotionally-invested, helping professions using the same survey instrument. Surveys of veterinarian satisfaction (Table 1) also suggest benefits from simply working with, and around, animals. While the research around pet ownership is somewhat ambiguous, interactions with animals are generally seen to be beneficial to physiological and mental health. Interest in or love of animals seems deeply engrained in the psyche of many veterinarians, and contributes to the often very early conception of their desired career path, which likely remains a persistent source of intrinsic motivation and well-being (via both meaning and accomplishment) well past initial attainment of this childhood dream. Animal interactions are also beneficial through their role as ‘social lubricants’ or catalysts for positive human interaction, and thus may play a central role in the well-being derived from social connectedness via colleague and client relationships, which depends more on the quality rather than the quantity of interactions. The central phenomenon of
the human-animal bond, and of animals as an interposed glue mediating social
connectedness, is understandably absent from standard well-being models but brings to
mind Heath’s concept of “satisfaction … from helping people through helping their
animals”\(^{13,p.52}\). Veterinary workplace teams are close-knit; Bartram found the [colleague]
relationships domain of a standard working conditions survey to be much higher in
veterinarians than the general population.\(^{66}\)

**Enabling Resources**

Positive psychology research and Self-Determination Theory also predict important
enabling factors for well-being (Figure 1), equivalent to the resources side of the Job
Demands-Resources model. *Autonomy* within work settings is variously associated with
self-control, job discretion, participation in decision-making, responsibility, and of course
self-determination, and requires an appropriate balance between absence of close
supervision yet presence of support. It fulfills the basic psychological need for free will
and control of one’s own behaviours as an expression of self, which in turn requires a
degree of self-awareness and mindful evaluation of congruence with personal ideals.\(^{51}\) In
a study of New Zealand veterinarians, job discretion, variety, and control of work pace
were the factors associated most positively with well-being and negatively with anxiety
and depression; interestingly in this study involvement of other people in work was not
related to job satisfaction or well-being.\(^{15}\) The central role of autonomy was also evident
in the job resources (decision latitude) and personal resources (proactive behavior and
self-efficacy) found to be most important in Mastenbroek’s Dutch study.\(^{21}\) Seligman’s
work further predicts that approaching tasks from the learnable perspective of *optimism*,
and with full engagement of one’s ‘signature strengths’, will maximize well-being
potential.\(^{42,45,47,67}\) Similarly experimental work has shown that conscious *gratitude* for the
‘good things in life’ induces persistent long-term increases in well-being.\(^{68}\)

**NURTURING WORK-RELATED WELL-BEING**

Since universities cannot directly influence the future work conditions of their students, it
is clear that the best opportunities for undergraduate intervention lie in fostering the
development of these enabling personal resources. This point was clearly highlighted by
Mastenbroek et al. (2014), who defined personal resources as “…aspects of the self that
are generally linked to resilience…”, thus encompassing “…a feeling of being
appreciated and in control, as well as skills and attitudes that facilitate these feelings. The period of undergraduate-to-graduate transition represents a particularly crucial time in the development of the professional self, as well as a time of elevated mental health risk. In medicine this has been termed ‘the professional formation’, a vulnerable period of concurrent personal, moral, and professional maturation. Thus it is particularly important to foster development of the personal resources promoting resilience during this formative period.

However, since well-being is necessarily reached via a personal journey of self-discovery, this destination itself cannot be taught. It is for example largely unknown whether eudaimonic conceptions of well-being can be increased, or are instead stable trait-like elements of personality. At least some elements of a eudaimonic approach can be learned; for example optimism can be increased through learned explanatory styles (i.e. cognitive behavioural techniques) that dispute pessimistic thinking. But to a large extent the aim in ‘teaching’ for future well-being and resilience (as indeed in all education) must be to provide the optimal conditions for nurturing personal development of enabling resources, which are likely to include the following:

- **Self-awareness** – encouraging discovery of personal identity and the developing professional self, such as through personality preference, signature strengths, vulnerabilities (e.g. perfectionism), personal values and principles, and leadership styles. As the basis of emotional intelligence, self-awareness closely aligns with the development of fundamental communication and professional skills. In the medical context this has been described as facilitating an “understanding that who they are as a person is central to the outcome of their work as physicians”.

- **Personal congruence** – encouraging critical exploration, clarification, and preservation of core values, sense of meaning, purpose, and mission or “calling”; and foreshadowing the embedding of personal meaning in future veterinary work – “meaningful practice” – such as through writing and committing to personal mission statements. The educational climate should allow that these are not ‘trained away’, but instead act as fundamental personal anchors during navigation of training.

- **Reflective practice** – encouraging habitual reflective practice, personalization and sense-making of experiences and role-modelling, and mindful awareness
and self-evaluation of progress against the desired state. Reflection is similarly crucial to the parallel development of veterinary professionalism.\textsuperscript{74}

- **Autonomy and self-efficacy** – encouraging internal motivation, self-determination, and self-efficacy; taking proactive responsibility for current and future states; setting and maintaining personal goals; and promoting personal growth by volitional challenge.\textsuperscript{20,75}

- **Optimism and gratitude** – encouraging positive re-framing of attitudes and outlook, appreciative enquiry and positive affirmation, ‘learned optimism’,\textsuperscript{67} and gratitude\textsuperscript{68}; conversely, promoting meta-cognitive approaches disputing negative thoughts and emotions. This might be underpinned by teaching of relevant positive psychology and well-being theory, essentially as summarized within this paper.

It is important to emphasize to students the dynamic nature of resilience; rather than being an innate attribute, resilience should be presented as the outcome of a dynamic equilibrium between contextual risk and protective factors,\textsuperscript{76} or demands and resources.\textsuperscript{19} This frames resilient veterinary graduates as active agents who mindfully employ strategies on both sides of this equilibrium to overcome adversity. It is also important that schools provide an enabling culture with effective social support and mentoring, and a sense of belonging and shared mission.\textsuperscript{10,71} This may require investment in faculty development, to ensure exposure to positive role-models, and counteract the detrimental effect of a negative ‘hidden curriculum’.\textsuperscript{71} We should remind both students and faculty that an emphasis on well-being is central to the education mission of producing excellent clinicians; for example well-being is deeply linked to academic performance\textsuperscript{50,75} and empathy,\textsuperscript{57} a key clinical skill in veterinary communication\textsuperscript{58} and a central characteristic of professionalism.\textsuperscript{57,71}

**CONCLUSION**

Though we acknowledge the above account is (intentionally) rather rose-tinted, our intention here is to complement, rather than detract from, the important recent focus on prevention of mental distress, burnout, and suicide in the veterinary profession. We certainly do not intend to imply that veterinarians should persist in unhappy work situations in vain search for fulfillment. However, focus on mental health prevention
should not counterproductively obscure the truth that most veterinarians find their work experience more positive than negative, and more satisfying than stressful. Occupational stress should not be presented as an intrinsic condition of the profession, but rather as a potentially manageable risk.

We contend that particularly at undergraduate level, the healthiest approach is to provide a balanced account in correctly portraying a veterinary career as a potential source of both stress and distress, but also of eudaimonic well-being and fulfillment. This reframes their future work not as a stressful job demanding attention to preventive self-care, but as a challenging and stimulating job full of ‘ups and downs’, commending attention to the buffering positive psychology of engagement, personal growth, meaning, connectedness, and self-actualization. Doing so allows us to provide an answer to the question of why to pursue a veterinary career: because it will likely increase lifetime well-being, or – if we invoke a broader eudaimonic use of the term – happiness.

ACKNOWLEDGEMENTS

The authors thank and acknowledge all the staff, supporters, and students who have participated in Murdoch University’s Veterinary Professional Life camp, where many of these ideas have taken root and grown; the early seeds planted by Suzy Green (The Positivity Institute), Michelle McArthur (University of Adelaide), and Kathy Ruby & Rick DeBowes (Washington State University, College of Veterinary Medicine); and Hill’s Pet Nutrition for supporting veterinary student development through the Veterinary Leadership Experience and allied programs worldwide. Special thanks are extended to Dianne Gardner (Massey University) for her helpful suggestions and editorial contributions to this manuscript.

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Table 1: Dichotomies illustrating a negative versus positive concept of veterinary work. Note theoretical individuals holding these polar work concepts could be performing exactly the same job, highlighting the subjectivity of work perceptions.

<table>
<thead>
<tr>
<th>Veterinary work concept</th>
<th>NEGATIVE</th>
<th>POSITIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A job</td>
<td>A calling</td>
<td></td>
</tr>
<tr>
<td>Stressful</td>
<td>Stimulating</td>
<td></td>
</tr>
<tr>
<td>Draining</td>
<td>Energising, fulfilling</td>
<td></td>
</tr>
<tr>
<td>Have to work</td>
<td>Want to work</td>
<td></td>
</tr>
<tr>
<td>Something I do</td>
<td>Something I love to do</td>
<td></td>
</tr>
<tr>
<td>Coping</td>
<td>Thriving</td>
<td></td>
</tr>
<tr>
<td>Extrinsic motivation</td>
<td>Intrinsic motivation</td>
<td></td>
</tr>
<tr>
<td>Pessimistic</td>
<td>Optimistic</td>
<td></td>
</tr>
<tr>
<td>Drains well-being</td>
<td>Generates well-being</td>
<td></td>
</tr>
</tbody>
</table>
### Table 2: Published sources of work satisfaction for veterinarians, in descending order.

<table>
<thead>
<tr>
<th>Study/Source</th>
<th>Response Type/Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bartram (2009)</td>
<td>Coded free-response “three … greatest sources of pleasure and/or satisfaction”</td>
</tr>
<tr>
<td>Figley &amp; Roop (2006)</td>
<td>Top three “on-the-job satisfiers”</td>
</tr>
<tr>
<td>Shibly et al. (2014)</td>
<td>What do you love about your job? (5-pt Likert response)</td>
</tr>
<tr>
<td>300 veterinarians (UK)</td>
<td>200 veterinary practices (US)</td>
</tr>
<tr>
<td>9,671 veterinarians (UK)</td>
<td>55 veterinary school faculty/staff (Austria)</td>
</tr>
<tr>
<td>Good clinical outcomes (39%)</td>
<td>Helping/healing animals (81%)</td>
</tr>
<tr>
<td>Relationships with colleagues (31%)</td>
<td>Thankful clients (69%)</td>
</tr>
<tr>
<td>Intellectual challenge/learning (30%)</td>
<td>Working as a team (42%)</td>
</tr>
<tr>
<td>Client satisfaction (29%)</td>
<td>Using skills/learning new ones (29%)</td>
</tr>
<tr>
<td>Relationships with clients (27%)</td>
<td>Daily contact with animals (21%)</td>
</tr>
<tr>
<td>Improving animal health &amp; welfare (16%)</td>
<td>Educating clients (17%)</td>
</tr>
<tr>
<td>Surgical work (14%)</td>
<td>Financial rewards (12%)</td>
</tr>
<tr>
<td>Working with animals (13%)</td>
<td>Clients (28%)</td>
</tr>
<tr>
<td>Financial rewards (12%)</td>
<td>Interest/enjoyment (17%)</td>
</tr>
<tr>
<td>Management (9%)</td>
<td>Status (14%)</td>
</tr>
<tr>
<td></td>
<td>Autonomy (12%)</td>
</tr>
<tr>
<td></td>
<td>Colleagues (12%)</td>
</tr>
<tr>
<td></td>
<td>Career opportunities (11%)</td>
</tr>
<tr>
<td></td>
<td>Working outside (10%)</td>
</tr>
</tbody>
</table>
Figure 1: A model of the positive contributions to eudaimonic well-being from veterinary work, aligned to the key mediating domains identified in positive psychology theory. Note the contribution of positive emotions (pleasure/hedonic happiness) has been excluded to make explicit the eudaimonic nature of the well-being model. The enabling resources which facilitate eudaimonic well-being (shaded) may represent fruitful targets for personal development in training undergraduate veterinarians for future well-being and resilience.