

Animal Welfare and the Human-Animal Bond in Student Education

How can we Understand Animal Feelings? How do we ask for Consent From a Horse?

Dobrobit živali in povezanost s človekom v izobraževalnem procesu

– kako razumeti živalske občutke? Kako pri konjih vzbujati voljo za sodelovanje?

Key words

animal welfare;
equine;
veterinary education;
human-animal bond

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Accepted: 25 March 2025

Students in veterinary education want positive interactions with their clients, but learn that a stressed animal can become unpredictable. If students can learn how to measure or evaluate the animal's affective state before the physical exam, they can begin to prepare for the animal's reactions. For example, assessing a cat's facial expression in routine communication (1). To do this, it includes understanding the veterinary role in the human-animal bond.

The bond between humans and pets is well known. When we pet a cat, it can purr to confirm its pleasure in the interaction. A dog might lean in to be petted more or touch your hand with its nose to request more scratches. I teach consent tests to veterinary students when interacting with a new cat or dog-pet the animal on the side of the face for 2-3 seconds, stop, and see if the animal initiates more contact with your hand. If so, you have gained consent and the veterinary procedure will progress easier than if you began immediately. Traditionally, we can watch an animal's behavior, including facial patterns for cats (1) and body posture, yawning, and body shaking in

Študenti veterine si želijo pozitivnih odnosov z živalmi, vendar se naučijo, da je žival v stresu lahko nepredvidljiva. Če se študenti poučijo o tem, kako izmeriti ali oceniti počutje živali pred pregledom, se lahko pripravijo na njihove odzive. Takšen primer je ocenjevanje obrazne mimike mačke pri rutinski obravnavi (Erjavec in Kovačič, 2023). Da bi to lahko storili, je potrebno razumeti vlogo veterinarja v vezi med človekom in živaljo.

Vež med ljudmi in hišnimi ljubljenci je dobro znana. Ko božamo mačko, lahko ta mrmra, da bi potrdila svoje zadovoljstvo ob interakciji. Pes se lahko nagne, da bi ga še bolj božali, ali pa se z nosom dotakne vaše roke, da bi zahteval več praskanja. Študente veterine učim preizkusov privolitve ob stiku z novo mačko ali psom – božajte žival po obrazu 2–3 sekunde, prenehajte in preverite, ali začne žival z vašo roko vzpostavljati več stika. Če je tako, ste pridobili privolitve in veterinarski postopek bo potekal lažje, kot če bi začeli takoj. Tradicionalno lahko opazujemo vedenje živali, vključno z obrazno mimiko pri mačkah (1) in telesno držo, zevanjem

dogs (2) as useful ways to evaluate a companion animal's stress status.

Additionally, physiology adds information, with heart rate and thermal imaging frequently used in dogs (3).

But what about horses?

Horses are used for sport, leisure, work, and therapy across the world. Living as not quite pets and not quite livestock, many horses develop a bond with their owners and some provide owners with an income. Maintaining healthy horses is a big component of veterinary medicine and, for many, the physical and mental health of humans. Respecting the horse-human bond requires minimizing the distress to the horse.

To my knowledge, there is no consent test to measure a horse's response to touch. Further, a horse's response to pressure is complicated, as a common component of training is asking the horse to move away from any pressure. Horses typically prefer touch over the withers and back, a common location of mutual grooming between horses. Some horses will initiate mouth movements during grooming along the withers, but does a lack of mouth movement mean displeasure? At time, there is no data to suggest a lack of interest when the behavior is not present.

Among veterinarians, there is no consensus on how a stressed horse presents (4). Horse pain is increasingly well understood - see the ethogram for pain developed by Torcivia and McDonnell, 2021 (5), but pain is not the same as stress. Regardless, if a horse is stressed, risk of injury is higher to those around it, which may interfere with diagnosis. Without finding ways to decrease the stress of the horse during veterinary care, a barrier will remain.

We are working to understand the horse-human interaction. Work in our lab and others have investigated handler attitude on behaviors toward the animal. We have demonstrated that, if individuals are excited to handle a horse, they will perceive a positive interaction regardless of the behaviors of the horse (6). It is demonstrated in livestock (7) that employees with negative attitudes will have higher negative behaviors with the animals. Consistently the way a handler views an animal will reflect the behaviors demonstrated to that animal.

Since we cannot ask horses for consent prior to handling (which would decrease stress in the presenting animal), and veterinarians do not agree on the horse's affective state, how can we ensure that a horse has a positive veterinary visit? Does the veterinarian's attitude when entering the exam influence the horse's stress levels? With at least half of United States veterinarians experiencing burnout (8), what is the impact on horse stress and welfare during a veterinary exam?

These questions are frequently reflected on in my research group. We hope, with time, to understand ways humans are influencing horse stress and the impact on veterinary care

in tresenjem telesa pri psih (2), ki so uporabni načini za ocenjevanje stresnega stanja družabne živali.

Poleg tega fiziologija pridaja dodatne informacije, pri čemer se pri psih pogosto uporabljata srčni utrip in termografija (3).

Kaj pa konji?

Konje po vsem svetu uporabljamo za šport, prosti čas, delo in terapijo. Številni konji, ki niso niti hišni ljubljenci niti rejne živali, se povežejo s svojimi lastniki, nekateri pa jim zagotavljajo tudi zaslužek. Vzdrževanje zdravih konj je pomemben del veterinarske medicine, za mnoge ljudi pa tudi vir telesnega in duševnega zdravja. Spoštovanje vezi med konjem in človekom zahteva, da se čim bolj zmanjša trpljenje konja.

Kolikor mi je znano, preizkus privolitve za merjenje odziva konja na dotik ne obstaja. Poleg tega je odziv konja na pritisk zapleten, saj je ta pogosta komponenta treninga in vključuje poziv konju, naj se odmakne od kakršnegakoli pritiska. Konji imajo običajno najraje dotik na področju vihra in hrbta, kjer se pogosto medsebojno negujejo. Nekateri konji bodo med nego vzdolž vihra pričeli gibati z usti, toda ali pomanjkanje gibanja z usti pomeni nezadovoljstvo? Trenutno ni podatkov, ki bi kazali na pomanjkanje zanimanja, kadar to vedenje ni prisotno.

Med veterinarji ni enotnega mnenja o tem, kako je videti konj v stresu (4). Bolečina pri konjih je vse boljše razumljiva – glejte etogram za bolečino, ki sta ga razvila Torcivia in McDonnell, 2021(5), vendar bolečina ni isto kot stres. Ne glede na to, ali je konj pod stresom, je tveganje za poškodbe za ljudi v njegovi bližini večje, kar lahko ovira diagnosticiranje. Brez iskanja načinov za zmanjšanje stresa konja med veterinarsko oskrbo bo ovira ostala.

Prizadevamo si razumeti interakcijo med konjem in človekom. V našem laboratoriju in drugih smo ugotavljali, kako odnos skrbnika vpliva na vedenje živali. Dokazali smo, da če so posamezniki navdušeni nad ravnanjem s konjem, bodo zaznali pozitivno interakcijo ne glede na vedenje konja (6). Pri domačih živalih je dokazano (7), da bodo delavci z negativnim odnosom izkazovali več negativnega vedenja do živali. Način, kako delavec gleda na žival, bo dosledno odražal vedenje, ki ga bo izkazal do te živali.

Ker konjev pred obravnavo ne moremo prositi za sodelovanje (kar bi zmanjšalo stres pri živali) in ker se veterinarji ne strinjajo o afektivnem stanju konja, kako lahko potem zagotovimo, da bo obisk veterinarja konj doživel kot pozitiven? Ali odnos veterinarja ob začetku pregleda vpliva na raven stresa pri konju? Ker vsaj polovica veterinarjev v Združenih državah Amerike doživlja izgorelost (8), kako to vpliva na stres in dobro počutje konja med veterinarskim pregledom?

O teh vprašanjih v moji raziskovalni skupini pogosto razmišljamo. Upamo, da bomo sčasoma razumeli, kako ljudje vplivamo na stres konj in kako to učinkuje na veterinarsko

provided to the horse. By improving this interaction, horses can have positive interactions at the vet and could improve the horse-human bond with the owner of the horse.

Work is continually being done to understand the emotional status of poultry (9, 10), fish (11), mollusks and crustaceans (12), and others. With time, we will hopefully gain an understanding of an animal's feelings to continue to improve animal welfare in veterinary medicine.

oskrbo konj. Z izboljšanjem te interakcije lahko konji pri veterinarju doživijo pozitivno izkušnjo, lahko pa bi izboljšali tudi vez med konjem in človekom ter lastnikom konja.

Nenehno potekajo prizadevanja za razumevanje čustvene stanja perutnine (9, 10), rib (11), mehkužcev, rakov (12) in drugih živali. Upamo, da bomo sčasoma razumeli čustva živali in tako še naprej izboljševali dobrobit živali v veterinarski medicini.

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