Short Research Article

Animal and Human Psychology

ABSTRACT:

Research on animals may harm them if not taken proper care of them. It's really riveting to know more about the animal behaviour, but sometimes we humans injure the animals knowingly or unknowingly.

We should respect the animal's freedom as most of the animals are caged or are separated from their family while the researchers do their job.

Keywords: - Animals

INTRODUCTION:

Have you ever wanted to communicate with an animal? Be it a pet or some random street animal, we all have tried to talk to an animal to see if it understands us or not. We have only seen these epic human-animal talk in movies such as "Spirited away", "Doctor do Little", etc.

Now it has become a reality. We try to communicate and understand how an animal feels, behaves, how it adapts to the different habitat, and many more interesting things. Animal psychologists are fascinated by these lovely creatures who live in the deep canopies and detritus of the forests (Wachman, 2018).

Many of us have heard the saying, "A dog is a man's best friend". But it is not necessary that only docile animals can be the best buddies of man (Archer, 1997; Udell et al., 2008; Groves, 1999). Many humans have bonds with the beasts of the jungle, and they are known as the Animal Psychologists.

THE BOND OF ANIMALS AND HUMANS:

Psychologists have studied many animals which varies from our ancestors, the chimps, to the other unrelated animals.

They study animals so that they can find out primarily two things:

I) The uniqueness of the animals lies in it's mind Thus, to find the capability of the animal's mind.

But this could cause you a rough neck. Many of the pet owners have faced the difficulties of teaching the animal some humanly manners. Researchers have spent centuries studying the same animal, but in vain. But the fun part in this is, the psychologists get attached to the animals and the other way around.

II) The tool which humans use a lot in the modern times: emotions.

They see the perspective of the animals by talking to them and studying their reactions towards their different emotion filled calls.

ANIMALS WHICH ARE THE FAMOUS FOR THEIR TALENTS:

Hans the Horse:

Psychologists have been fascinated by how animals are truly capable of human-like brains.

In the early 1900s, A horse named Der kluge Hans which translates to Clever Hans, has answered all the questions asked to him in a dramatic fashion through his public performance in Berlin (Samhita & Gross, 2013). He was trained by a mathematician, Wilhelm Von Ofsten. This brilliant horse becomes more talented as he could do simple arithmetic and tell the time by using its hooves to tap the ground and imitate letters (Agrillo & Miletto Petrazzini, 2012).

It's strange as well as incredible to know that Hans could also identify the painters by seeing their paintings or detecting the composers of the euphony.

We all could think that this story is fake, but it is 100% true; The German board of Education played the detective to find any foul play, but there was no evidence of it being an impostor.

Pavlov's Dogs:

In 1870's, Russian psychologist, Ivan Pavlov studied dogs. Now you may wonder what is so special in dogs? But Pavlov's reason to feature dogs in most of his introductory psychology class and textbook is due to the dog's understanding and learning the principle of classical conditioning. Pavlov had discovered classical condition by accident (McLeod, 2018). He noticed that the dogs salivate as a response to few meaningless cues such as the ring of bells, smell of food, etc. This has become challenging for other psychologists as there is more to the classical conditioning.

Washoe the Chimp:

The deaf and dumb use sign language to communicate, but have you ever seen a chimp communicate with sign language? This has been a long-running question in animal psychology has been whether human language can be taught to animals. In the early last century, an experiment lingered in the minds of a couple. Our primates might be capable of learning human language if they were raised in human culture (Gökselet al., 2009). This prompted the couple, Luella and Winthrop Kellogg to raise the chimp Gua alongside their son. It ended in failure, with Gua unable to speak. Decades later, animal researchers realised our non-human primates would never speak because of the different anatomy of their mouth and vocal chords.

Recognition of this anatomical fact led to an intense period of work to teach apes sign language and, later, communication by symbols on a picture board. The first chimp to be taught sign language was Washoe. Washoe hailed from West Africa and was adopted by a spousal psychologist team, Allen and Beatrix Gardner (Gardner & Gardner, 1969). Washoe eventually learned to use over 250 different signs. There is disagreement over whether Washoe ever really invented new words, such as the time she allegedly signed "water", "bird" at the sight of a swan.

Koko the Gorilla:

Most of the ape language studies have involved chimps, but one particularly famous exception is Koko the Gorilla, who has been taught sign language and English for decades by the psychologist Francine Patterson (Specter, 2014). A few years ago Koko made headlines around the world when it was alleged by the Gorilla Foundation in California that she was mourning the passing of actor and comedian Robin Williams, who she'd met for an afternoon in 2001. A YouTube clip of their encounter has been viewed over

three million times. Koko has also starred in her own books, including a children's book, *Koko's* Kitten, and been the subject of several film documentaries, most recently a BBC programme Koko: The Gorilla who talks to people. "What we can really learn from this extraordinary science experiment turned love affair?" asks the film, highlighting in a nutshell one key problem with this entire field – the emotional closeness between researchers and the animals they study, challenging the pursuit of scientific objectivity.

The sad thing about the story of Koko and the other apes made famous by their part in psychological study is that the whole field has crashed, not only because of methodological criticism, but also amid accusations of animal mistreatment. A recent Slate article summed up the situation: "No new studies have been launched in years, and the old ones are fizzling out. A behind-the-scenes look at what remains of this research today reveals a surprisingly dramatic world of lawsuits, mass resignations, and dysfunctional relationships between humans and apes." Similarly, a major new paper in *Annual Reviews of Anthropology* by Don Kulick says, "The threadbare field left today is an alarming not-so-fun house of intrigue, betrayal, accusation, threats, litigation, dismissals, obese apes, dead apes, mass resignations, and even, inevitably, sex."

Peter the Dolphin:

Sex is also a surprising theme of dolphin research that took place in the 1960s at a lab known as Dolphin House, built on the Caribbean island of Saint Thomas. There, John Lilley and his wife conducted investigations into whether dolphins are capable of mimicking human speech, and later into the effects of LSD on dolphins. As part of the language research, a woman called Margaret Howe Lovatt moved into a specially designed dolphinarium with a young male dolphin called Peter, living there more or less 24 hours a day in an office that overhang his water tank. The idea was that with constant human contact, it would perhaps be possible for a dolphin to fully grasp and imitate human language. One problem: the pup's burgeoning sexual needs began to interrupt the language lessons. At first Peter was intermittently relocated to spend time with female dolphins in another tank, but Lovatt found that this interfered too much with her research and the bond she was trying to establish, So she began to satisfy Peter's needs herself (Anonymous, 2014). "It wasn't sexual on my part. Sensuous perhaps," she told Christopher Riley, the producer and director of the BBC documentary *The Girl Who Talked To Dolphins*. "It seemed to me that it

made the bond closer," she continued. "Not because of the sexual activity, but because of the lack of having to keep breaking. And that's really all it was. I was there to get to know Peter. That was part of Peter."

This isn't just an odd tale, but a sad one. As Lovatt's experiment was coming to an end, news came that funding was being withdrawn from the lab. The following year, Dolphin House lab was forced to close. The story goes that after being moved to claustrophobic surroundings in Miami, Peter took his own life.

Alex the Parrot:

Language skills and a keen intelligence are not only the preserve of apes and dolphins, as shown – to many experts' surprise at the time – by the remarkable achievements of the African Grey parrot Alex (an acronym for "Avian Learning Experiment"), who was studied for 30 years by the psychologist Irene Pepperberg, until the parrot's death in 2007 at the age of 31.

Pepperberg, who bought Alex from a pet store in 1977, was apparently inspired to study Alex because she'd read about the linguistic achievements of Washoe (see above) and other animals. As well as being famous for his one liners, Alex apparently learned over 100 words, could name over 50 objects and knew his colours and shapes. He starred in several BBC and PBS documentaries. Like many of his ape peers in the research world, Alex also received notable obituaries upon his death. *The Economist*referred to him as science's "best known parrot " (Callaway, 2012) The *New York Times* ran with "Brainty parrot dies, emotional till the end", in reference to the fact that Alex's last words to Pepperberg the night he died were "You be good, see you tomorrow. I love you."

Compared with his ape peers, it seems that Alex contributed to research that is more likely to stand the test of time. He featured in dozens of quality peer-reviewed papers by Pepperberg. In his recent review of human-animal communication, anthropologist Don Kulick wrote the "… emphasis on cognition and downplaying of language seem to have protected Pepperberg's studies [of Alex] from the sort of critical onslaught that pulverized ape-language research".

Betty the Crow:

Alex is far from being the only smart bird in town. Betty, the New Caledonian crow, though less famous than the parrot, made headlines around the world in 2002 when it was reported that she had shown the ingenuity to make a hook out of a straight piece of wire, to reach food in a plastic tube (another crow had taken off with the hook provided by the researchers). This was considered a big deal because, as one of the researchers told BBC, "Although many animals use tools, purposeful modification of objects to solve new problems, without training or prior experience, is virtually unknown". In fact, the researchers claimed Betty's tool-making was more impressive than the tool use seen among chimps (Hunt & Gray, 2004).

However, as is usually the way with animal research of this kind, doubts have since been raised about the way Betty's feat was interpreted. Last year, a different team of researchers studied 18 new Caledonian crows as they made tools with the branches they use in the wild. Crucially, the researchers observed that most of the birds performed the same final modification – to create a hook shape – as seen by Betty in the lab. In other words, Betty's feat was not entirely spontaneous, but probably part of her species' natural repertoire. Meanwhile, while we're talking about corvids, an honourable mention should go to psychologist Nicky Clayton's scrub-jays, who have been observed demonstrating many behaviours previously considered uniquely human, such as advanced deceit. For instance, a jay will re-hide her food stash if a potential thief was nearby when she first hid it.

Echo the Elephant:

Echo the Elephant had been filmed and observed in Kenya's Amboseli National Park for several decades, making her the world's most studied elephant. Echo, who was her tribe's matriarch for about 36 years, starred in at least four documentaries, including David Attenborough's Echo: An Unforgettable Elephant. The principal researcher was ethologist Cynthia Moss who, like many of the other researchers mentioned in this list, formed a powerful emotional bond with Echo. Moss learned from Echo and the other elephants of Amboseli about their emotional lives, their transmission of cultural practices and their capacity for future planning and teamwork (Moss, 1992). This is illustrated in the clip above, in which Echo marshals the support of her tribe's adult females to execute an apparently daring rescue of her daughter, Ebony, who had been kidnapped by a rival tribe. Echo died in 2009 at the age of 64.

Harlow's Monkeys

The importance of physical touch between mother and baby is today widely recognised, but back in the 1950s this wasn't the case, thanks in part to the influence of Freud and his ideas that an infant bonds with her mother primarily because she satisfies her basic needs of thirst and hunger. The American psychologist Harry Harlow's research in the 1950s with rhesus monkeys changed this. Though ethically controversial, it provided a powerful demonstration of the importance of physical contact in mother-infant attachment (Shallcross, 2012).

Inspired by his observation that monkeys separated from their mothers grew highly attached to and possessive of their blankets, Harlow created two forms of surrogate mother: one made of wire that provided milk, another warm and soft that provided comfort but no milk. Given the choice, infant monkeys spent the majority of their time with the soft, warm version. However, without their mothers, even the monkeys who clinged to the cloth-covered surrogates developed serious behavioural problems later, lending graphic evidence to support the British psychologist John Bowlby's claims about the importance of early maternal care.

ANIMALS SUFFER WHILE THEY ARE BEING STUDIED:

TORTOROUS PROTOCOLS:

Animals are experimented on by using drugs, burning of skin , causing brain damage, implanting electrodes into the brain, maiming, blinding, and other painful and invasive procedures. It can include protocols that cause severe suffering, such as long-term social isolation, electric shocks, withholding of food and water, or repeated breeding and separating of infants from mothers. In toxicity testing, animals used in chronic toxicity and carcinogenicity studies receive the test substance daily, seven days a week, for up to two years with no recovery periods. Many, if not most,

animals die before the end of the study. With the exception of chimpanzees, animals who survive their use in research and testing can be killed after the study is completed.

Many animal experiments utilize restraining devices, designed to prevent an animal from moving. Some research projects call for immobilization of specific parts of an animal's body—head and neck, legs and pelvis—while other protocols involve immobilization of an animal's entire body. For example, researchers at several major U.S. universities have all conducted "stress experiments" on rats and mice. These experiments included immobilizing mice and rats in tubes, shocking their feet, suspending them by their tails, and forcing them to swim to avoid drowning. Researchers claimed these experiments had relevance to human anxiety and depression. Although restraint is particularly stressful and frustrating for an animal, some experiments are designed to hold animals in partial or total immobilization for months.

Anesthetization, intubation, and euthanasia are also common lab procedures which require extensive training and skill. When improperly performed, these procedures cause extreme pain and discomfort. For example, if a researcher uses a paralyzing agent on an animal but does not monitor vital signs to make sure she/he is adequately anesthetized, there is a great chance that the animal is actually experiencing pain but unable to

move. Unfortunately, in some cases, the lab personnel often lack the experience and training—and sometimes the sensitivity—needed to avoid unnecessary animal suffering.

The areas of xenotransplantation (transplanting cells, tissues, or organs from one species into another species) and genetic engineering also create a great deal of suffering and death for animals. Genetic engineering consumes and destroys untold volumes of animals in attempts to create animals with specific traits. Nonhuman primates, cats, dogs, mice, rats, and others have all been subjected to genetic manipulation. Many of these animals die, while suffering from abnormalities and other diseased conditions.

DAILY EXISTENCE:

Animals in labs suffer not only pain from protocols, but also severe stress from day-to-day laboratory life. They spend their lives in barren cages, unable to make choices or express natural behaviors. Most never experience fresh air or sunshine, only bars and concrete. Those few facilities that provide some outside caging typically rotate the animals, giving them limited and infrequent amounts of time outdoors. Standard lab conditions, such as small, crowded cages, lack of enrichment, loud noises, and bright lights out of sync with natural lighting are all known to create stress in animals who in turn show physical symptoms of the stress,

including chronic inflammatory conditions. Studies show that mice are capable of empathy and become even more stressed when witnessing other mice in distress. Other research documents the long-lasting effects on chimpanzees from the stress and trauma of living in a lab and being used in research and testing. In 2009, an undercover lab investigation revealed monkeys frantically spinning around and around in their cages, biting open wounds, mutilating themselves, and ripping out their own hair, all because of the chronic psychological distress they must endure. The term used for this is "stress-induced psychosis"—laboratories are literally driving these animals crazy. After seeing footage of chimpanzees from this same investigation, famed primatologist Dr. Jane Goodall stated, "In no lab I have visited have I seen so many chimpanzees exhibit such intense fear. The screaming I heard when chimpanzees were being forced to move toward the dreaded needle in their squeeze cages was, for me, absolutely horrifying."

For all of the animals trapped in labs, their day-to-day existence is traumatic in itself—even without their forced participation in one dreaded protocol after another. They experience ongoing mental and physical suffering from the endless boredom, confinement, fear, and emotional stress of daily laboratory life. Add to this the fear and agony of a procedure,

and only then can we start to understand the desperation and pain in which they live, every day—and for most, for their entire lives.

LEGAL PROTECTION: REALITY OR RHETORIC?:

The Animal Welfare Act is the only federal law that provides even minimal protection for animals in laboratories. (The federal Public Health Service's (PHS) Policy on the Humane Care and Use of Laboratory Animals covers animals in NIH-funded research, but the PHS does not conduct inspections itself. Instead, it relies on institutions to inspect their own labs.) However, it specifically excludes rats, mice, and birds bred for research, who constitute 90-95 percent of animals in labs. For the approximately 10 percent of warm-blooded animals in labs who are covered under the AWA, the law covers husbandry only—meaning specific standards for their housing, feeding, and handling, including veterinary care. It does not prohibit any kind of experiment regardless of the amount of pain or distress it might cause. Instead, it requires oversight committees (called Institutional Animal Care and Use Committees, or IACUCs) to review and approve research protocols. These are composed and overseen by the research facility itself and are widely regarded as "rubber stamp" committees. Their members are primarily animal researchers, and the facility's CEO selects everyone on the committee. As a result, IACUCs allow the majority of proposed experiments, regardless of the amount of

suffering they inflict. If deemed “necessary” to the study, researchers can even withhold pain medication.

According to USDA’s latest available figures (2009), 7.8 percent of all AWA covered animals in labs underwent painful procedures without the benefits of pain relief. However, it is assumed that the degree of pain endured is grossly underreported, as no objective criteria is in place to guarantee accurate perception and reporting of pain and suffering. Under current federal law, the administration of pain relief is discretionary, rather than mandatory. When a researcher or attending veterinarian feels that analgesics, anesthesia, or tranquilizers will confound the results of an experiment, pain relief can be legally withheld. This concept of “necessary pain” is basic to the spirit of the AWA, which specifically states that its intent is not to regulate or restrict the planning and performance of experimental designs and protocols. One career researcher, for example, reported chronic diarrhea in monkeys in labs as “normal.” Another claimed the “rocking back and forth” is something “they just do”—so inured are they to the suffering animals in labs endure. In short, while the AWA and the IACUC system purport to ensure “humane” treatment of animals in labs, this system is so limited and so plagued with loopholes that these animals have little or no protection.

Research shows that people accept animal research only when they think that animals don't suffer, and that it's scientifically necessary. In fact, they do suffer and it is not necessary. We can attest to this today in a way that we never could in the past. NEAVS' science team has methodically looked at the use of animals in research and published papers in peer-reviewed journals that demonstrate that animal research is not necessary, is not predictive for humans, and is often irrelevant, inaccurate, or even dangerous for human health. The facts make it clear that we can save animals and humans when we replace animal research with alternative methods that deliver effective, predictive, human-relevant results. In short, we can end the harm and suffering of the animals and better benefit human health.

MY INSIGHT OF ANIMAL AND HUMAN PSYCHOLOGY:

According to the research I have done, I have learnt a lot of pros and cons of research of animals.

THE PROS:

We can get to know them more and understand their behaviour. Intelligence of animals can be useful for humans too.

We can give our love to them as they give us their love to us. We can get to know their comfort and emotions. Animals can become our best friends if we take care of them.

THE CONS:

Firstly, animals are taken far away from their natural habitat and especially family. I was watching Animal Planet and a researcher was researching about hyenas. Compared to the information I had read, his method of researching was the best in my opinion. He studied the hyenas by keeping them in their natural environment, and had encaged himself instead of the hyenas. We humans can adapt easily by using technology, but animals lack in that prospect and take time to adapt, and from what I have learnt, if the animal is not able to adapt itself to its surrounding, it could be fatal for it.

Another drawback of animal research is that they have to take in drugs as I mentioned earlier. This could cause a lot of permanent and painful damage to the animal's body.

We do need to know more about animals, but we have to be careful as they are not toys, we can't just break them and try to fix them back. They are not living things, they are living beings just like us. They have emotions too.

TERMINATION:

Animals have basis moral right to respectful treatment…this inherited value is not respected when animals are reduced to being mere tools in scientific experiment. Animals and people are alike in many ways; they both feel, think, behave, and experience pain. Thus, animals should be treated with the same respect as humans. Yet animals' rights are violated when they are used in research because they are not given a choice. Animals are subjected to tests that are often painful or cause permanent damage or death, and they are never given the option of *not* participating in the experiment. Animals don't willingly sacrifice themselves for the advancement of our race. They can't fight back with their voice and arn't given choice, thus they have to suffer. We put them to their eternal sleep for no other reason than developing the human society.

The pain and suffering that experimental animals are subjected to is not worth any possible benefits to humans. Animals feel pain in many of the same ways that humans do; in fact, their reactions to pain are virtually identical. When animals are used for product toxicity testing or laboratory research, they are subjected to painful and frequently deadly experiments. Two of the most commonly used toxicity tests are the Draize test and the LD50 test, both of which are infamous for the intense pain and suffering they inflect upon experimental animals. In the Draize test the substance or product being tested is placed in the eyes of an animal, generally a rabbit is

used for this test; then the animal is monitored for damage to the cornea and other tissues in and near the eye. This test is intensely painful for the animal, and blindness, scarring, and death are generally the end results. The Draize test has been criticized for being unreliable and a needless waste of animal life. The LD50 test is used to test the dosage of a substance that is necessary to cause death in fifty percent of the animal subjects within a certain amount of time. To perform this test, the researchers hook the animals up to tubes that pump huge amounts of the test product into their stomachs until they die. This test is extremely painful to the animals because death can take days or even weeks. According to Orlans, the animals suffer from vomiting, diarrhea, paralysis, convulsion, and internal bleeding. Since death is the required endpoint, dying animals are not put out of their misery by euthanasia. The LD50 test is "scientifically unjustifiable". The precision it purports to provide is an illusion because of uncontrollable biological variables". The use of the Draize test and the LD50 test to examine product toxicity has decreased over the past few years, but these tests have not been eliminated completely. Thus, because animals are subjected to agonizing pain, suffering and death when they are used in laboratory and cosmetics testing, animal research must be stopped to prevent more waste of animal life.

The testing of products on animals is completely unnecessary because viable alternatives are available. Many cosmetic companies, for example, have sought better ways to test their products without the use of animal subjects. In Against Animal Testing, a pamphlet published by The Body Shop, a well-known cosmetics and bath-product company based in London, the development of products that "use natural ingredients, like bananas and Basil nut oil, as well as others with a long history of safe human usage" is advocated instead of testing on animals. Furthermore, the Draize test has become practically obsolete because of the development of a synthetic cellular tissue that closely resembles human skin. Researchers can test the potential damage that a product can do to the skin by using this artificial "skin" instead of testing on animals. Another alternative to this test is a product called Eyetex. This synthetic material turns opaque when a product damages it, closely resembling the way that a real eye reacts to harmful substances. Computers have also been used to simulate and estimate the potential damage that a product or chemical can cause, and human tissues and cells have been used to examine the effects of harmful substances. In another method, in vitro testing, cellular tests are done inside a test tube. All of these tests have been proven to be useful and reliable alternatives to testing products on live animals. Therefore, because effective means of product toxicity testing are available without the use of live animal specimens, testing potentially deadly substances on animals is unnecessary.

However, many people believe that animal testing is justified because the animals are sacrificed to make products safer for human use and consumption. The problem with this reasoning is that the animals' safety, well-being, and quality of life is generally not a consideration. Experimental animals are virtually tortured to death, and all of these tests are done in the interest of human welfare, without any thought to how the animals are treated. Others respond that animals themselves benefit from animal research. Yet in an article entitled "Is Your Experiment Really Necessary?" Sheila Silcock, a research consultant for the RSPCA, states: "Animals may themselves be the beneficiaries of animal experiments. But the value we place on the quality of their lives is determined by their perceived value to humans". Making human's lives better should not be justification for torturing and exploiting animals. The value that humans place on their own lives should be extended to the lives of animals as well.

Still other people think that animal testing is acceptable because animals are lower species than humans and therefore have no rights. These individuals feel that animals have no rights because they lack the capacity to understand or to knowingly exercise these rights. However, animal experimentation in medical research and cosmetics testing cannot be justified on the basis that animals are lower on the evolutionary chart than humans since animals resemble humans in so many ways. Many animals, especially the higher mammalian species, possess internal systems and organs that are identical to the structures and functions of human internal organs. Also, animals have feelings, thoughts, goals, needs, and desires that are similar to human functions and capacities, and these similarities should be respected, not exploited, because of the selfishness of humans. Tom Regan asserts that "animals are subjects of a life just as human beings are, and a subject of a life has inherent value. They are . . . ends in themselves". Therefore, animals' lives should be respected because they have an inherent right to be treated with dignity. The harm that is committed against animals should not be minimized because they are not considered to be "human."

Conclusion

In conclusion, animal testing should be eliminated because it violates animals' rights, it causes pain and suffering to the experimental animals, and other means of testing product toxicity are available. Humans cannot justify making life better for themselves by randomly torturing and executing thousands of animals per year to perform laboratory experiments or to test products. Animals should be treated with respect and dignity, and this right to decent treatment is not upheld when animals are exploited for selfish human gain. After all, humans are animals too.

Imagine how innocent prisoners feel when they are captivated for something haven’t done. Animals are suffering the same way as those prisoners are.

Comfort, love, freedom, their home and nature are the basic thing animals need to survive. But we take them away for our benefit. Give them all they need and they would live a happy life. They would even cooperate and show you their talents. Think of them as introverts, they are just not ready for the sudden change. Give them time and they would be as close to you as possible.

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