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## TRAINER INTERACTION WITH DOLPHINS AS ANIMALS WITH A HIGH LEVEL OF INTELLIGENCE

Nisa Angelia Pasaribu<sup>1</sup>, Khofifah Shaira Siregar<sup>2</sup>, Eva Betty Simanjuntak<sup>3</sup>, Rika Pratiwi Pasaribu<sup>4</sup>, Putri Ayu Afriani Panjaitan<sup>5</sup>, Putri Rahayu Hasibuan<sup>6</sup>, Putri Ladia<sup>7</sup>, Rachel Dawolo<sup>8</sup>

Email: [nisaangelia18@gmail.com](mailto:nisaangelia18@gmail.com)<sup>1</sup>, [khofifahshairasiregar2004@gmail.com](mailto:khofifahshairasiregar2004@gmail.com)<sup>2</sup>,  
[evabettysimanjuntak@gmail.com](mailto:evabettysimanjuntak@gmail.com)<sup>3</sup>, [rikapratiwipasaribu@gmail.com](mailto:rikapratiwipasaribu@gmail.com)<sup>4</sup>,  
[afrianipanjaitan13@gmail.com](mailto:afrianipanjaitan13@gmail.com)<sup>5</sup>, [putriahayuhb03@gmail.com](mailto:putriahayuhb03@gmail.com)<sup>6</sup>, [putriladia04@gmail.com](mailto:putriladia04@gmail.com)<sup>7</sup>,  
[racheldawolo52@gmail.com](mailto:racheldawolo52@gmail.com)<sup>8</sup>

Universitas Negeri Medan

### ABSTRACT

*This study explores the dynamics of interactions between trainers and dolphins, marine mammals known to have high levels of intelligence. The main focus of this study is to understand how trainers utilize and develop dolphins' cognitive abilities through daily interactions, training, and communication. This study uses a Qualitative Descriptive research method with data collection techniques, namely literature studies of data reviews from various reference books and previous research results that are relevant to the study to obtain a theoretical basis for the problems to be studied. The results of the study indicate that effective interactions between trainers and dolphins are based on a deep understanding of dolphin behavior and cognitive abilities, as well as the use of positive and responsive training techniques. This study also highlights the importance of non-verbal and emotional communication in building strong and trusting relationships between trainers and dolphins. These findings provide valuable insights into how humans can interact positively and effectively with intelligent animals such as dolphins, and emphasize the importance of animal welfare in the context of training and human-animal interactions.*

**Keywords:** Interaction, Trainer, Dolphin, Animal, High Intelligence.

## INTRODUCTION

Pets are animals that are tamed and cared for by their owners, and have an emotional bond between them. Emotional bonds will form a relationship between humans and animals. This relationship has been widely studied and proven to provide positive benefits for their owners in terms of physical, psychological, and social well-being, where making pets will become an increasingly important need in modern life (Chen et al., 2012).

Among the various animals that can be classified as pets, dolphins have an interesting level of development. Judging from the annual competitions and events that are routinely held both nationally and internationally, the increasing number of dolphin lover communities and the number of participants, the increasing number of breeders, and the emergence of training centers for dolphins as well as the rules and requirements for training that are increasingly updated. Therefore, this is expected to increase the number of adoptions of pet dolphins in Indonesia in the future.

The phenomenon of human interaction with animals has been going on for thousands of years, since the time of ancient humans, humans have always lived side by side with animals. As stated by Robinson in his book entitled *The Waltham Book of Human-Animal Interaction*, humans have tamed young wolves since 500 thousand years ago, and making wild animals as pets has been done by the kingdoms of Egypt and Ancient Greece (Robinson, 1995).

Proven by a survey conducted by the GFK organization (Growth from Knowledge, 2016) which describes that more than half, namely 56 percent of people in the world have pets, be it dogs, cats, fish, birds, reptiles and others. It can be concluded that half of the world's population has interacted with their pets, but the process of this interaction is rarely studied in terms of meaning both from the perspective of humans and from the perspective of the animals themselves.

According to Bimo Walgito (2003: 65) interaction is a relationship between one individual and another where one individual can influence another individual so that there is a reciprocal relationship. Meanwhile, etymologically in English, "animal" is called animal, from Latin, namely "animalis", which means "having breath" (Cresswell, 2010). The word "animal" is usually used to refer only to non-human members in the taxonomy of the kingdom Animalia. Sometimes, only close relatives of humans such as mammals and other vertebrates. (Merriam-Webster, 2017).

Examining the meaning in interacting with animals, the selection of animals that are in accordance with cognitive capabilities that approach humans is very necessary. Dolphins are one of the marine mammals that are often performed in various tourist attractions and circuses because of their intelligence. This significant dolphin intelligence is often used by humans in various studies, entertainment and medicine. In line with the article [sains.kompas.com](http://sains.kompas.com) which states that dolphins are known as intelligent marine mammals. They have advantages in communicating with their own kind and are able to interact with humans. Dolphin intelligence even beats several other mammals. (Wiji, 2012).

In essence, humans are also animals, *Homo Erectus*. Aristotle (in Tasmara, 2000: 248) said that humans are thinking animals (man as the animal as reasons). Humans themselves often try to imitate animal communication signals when interacting with other animals. The movement of stroking and rubbing pets is an action that although it seems natural, the same behavior also occurs within these species in interspecies communication. Like dogs, they can use communication taught by humans such as body language as a guide, foraging for food, and searching for hidden objects (Liliweri, 2011: 1026).

Richard Shulman (in Liliweri, 2011: 1029) said that humans can communicate with animals, or animals with other species of animals using "telepathic" language. Telepathic language is a universal soul language used by all species. This ability is an extension of natural intuition. Mulyana (2012: 260) states that verbal symbols or messages are all types of

symbols that use one or more words. A verbal code system is called a language. Language can be defined as a set of symbols, with rules for combining these symbols that are used and understood by a community. In verbal communication, humans use verbal language either orally, in writing or electronically (Hardjana, 2003: 23).

The basic function of language is to name or nickname people, objects, and events, to relate to other people and to convey messages such as According to Larry L. Barker (in Mulyana 2012: 266) that language has three functions, namely, naming, interaction and transmission of information. The ability of language packaged in words is very limited, as limited as the number of words because not all words are available to refer to an object. A word can represent reality, but not reality itself (Mulyana, 2012: 269).

According to Ardianto (2010: 158) Symbolic Interactionism also has the assumption that each individual has a certain way of making meaning, interpreting, and taking actions. Mind, self, and society work together to influence how individuals make meaning.

This very significant intelligence makes dolphins one of the easiest animals to train and teach. The ability of trained dolphins is very much in demand by many people to watch so that many are displayed in amusement park rides. In training dolphins, experience is needed in training other animals, especially aquatic mammals.

Dolphins that have been adopted, kept or entered a human-operated conservation center are usually kept in a place called a Dolphinarium. Sfetcu said, Dolphinarium is an aquarium for dolphins. Dolphins are usually kept in large pools, although occasionally they are kept in cages in the open sea, either for research or for public shows.

The difference between this study and previous studies lies in its specific focus on the context of trainer interaction with dolphins that have high intelligence, unique levels of liking to imitate. This study aims to provide a deeper understanding of trainer interaction with dolphins as animals that have high intelligence and unique levels of liking to imitate.

## **METHOD**

This study uses a Qualitative Descriptive research method with a data collection technique, namely literature study. (Sarwono, 2006) states that literature study is a review of data from various reference books and previous research results that are relevant to the research to obtain a theoretical basis for the problem to be studied. Literature study is referred to as library research or library research. The limitations of this activity only lead to the production of articles, journals and library collections without the need for field research. This research comes from Books, National Journals or Articles and previous Theses that are the same theme as this research starting from the period 2010.

## **RESULTS AND DISCUSSION**

Love for animals is usually the basis for a human being to continuously interact positively with animals. Becoming a trainer is usually motivated by a love for animals, whether they are domesticated or wild. Because love for animals allows trainers to position themselves as equals with dolphins so that the type of communication used is also adjusted so that the communication process is more efficient, moreover, the process of experiencing the value of experience, namely interaction with animals, can change a person's personality into a lover of these animals.

Various integrations of communication aspects are used to convey instructions for dolphins to understand tricks. Trainers use this type of communication because it is easier for dolphins to understand, and has been passed down from generation to generation from seniors. The ability of dolphins to follow tricks has been taught and trained since the dolphins were born, even changing trainers for dozens or even tens of years. So it is not uncommon for trainers to have to learn the tricks.

In communicating with animals, verbal communication is also used, but in limited quantities, due to the differences in language types between humans and animals. Verbal communication that is commonly used is words, or simple phrases that are usually spoken to children. Verbal communication used in training dolphins is mostly oral (words) and a little written (numbers). Verbal communication must be done every day, both expressions and instructions.

Nonverbal communication is the type of communication most often used by trainers in interacting with dolphins. The types of nonverbal communication used in dolphin shows are gestures, objects, ultrasonic whistles, eye gaze focus, and telepathic language. The combination of these types of communication allows for a two-way communication process between the trainer and the dolphin. The communication process begins with eye gaze focus then makes an inner connection so that two-way interaction is emitted, then verbal and nonverbal communication become stimulants for the tricks to be performed. Not only tricks, but emotional feelings can be conveyed from the trainer to the dolphin.

The trainer's meaning in training is also related to the symbols used to obtain meaning so that the interpretation of a sign can be in line with the behavior of the dolphin. The trainer's meaning of a symbol can change because it is influenced by interactions with the dolphin itself.

Symbolic interaction can be a supporting theory for how meaning can change according to the context of time and experiences experienced in the interaction between both the trainer and the trained dolphin.

The trainer interprets interaction with dolphins as an experiential value in practicing the meaning of his life as an animal lover. Love for dolphins can also be grown by getting to know the dolphins more closely.

The communication aspects that play the biggest role in being used so that trainers can see that dolphins understand instructions are non-verbal communication (gestures) and telepathic language, but the integration of communication aspects such as verbal and object communication is also necessary as a supporting tool in creating a more effective flow of interaction.

Non-verbal communication gestures are mostly used by both trainers and dolphins, the trainer will move his hands to give a trick instruction signal then the dolphin responds with body movements to convey something to the trainer. While objects usually become symbols associated with a particular trick, such as a hula hoop twirled on the snout, and a basketball headed. Ultrasonic sounds from whistles are also often used as markers for actions that must be taken by dolphins such as stop, wrong, and calling.

Telepathic language represented by eye gaze focus becomes the first starting point to keep the interaction going. Dolphins can also entertain and empathize with their trainers if they are not focused. Two-way communication is described by the trainer, because mutual understanding is the main key to presenting a good show.

### **Dolphin Intelligence:**

Dolphins are known as one of the most intelligent animals in the world. They have relatively large brains compared to their body size, even ranking second only to humans in brain-to-body ratio.

Quoted from the wilddolphinproject site, the dolphin brain has spindle neurons, which are only found in a few other species such as humans and primates. These neurons play a role in complex cognitive functions such as recognizing, remembering, communicating, and solving problems.

In addition, dolphins are also known to be able to use tools and have excellent learning abilities. For example, some dolphins in Shark Bay, Australia, use sea sponges to protect their noses while searching for food on the seabed.

Dolphins' cognitive abilities are also reflected in their ability to communicate in complex ways. They use a variety of vocalizations, including unique whistles that function like personal names, to communicate with each other.

Dolphins have the remarkable ability to recognize themselves in mirrors, a sign of high intelligence and self-awareness. This ability has been demonstrated through the "mirror test" experiment, in which dolphins display behavior that suggests they understand that the reflection in the mirror is themselves, not another dolphin.

1. Complex Brain Structure:

- a. The dolphin brain has a complex structure, with a large neocortex, an area of the brain associated with higher-level cognitive functions such as problem solving and self-awareness.
- b. Research shows that dolphins have a greater number of neurons than many other mammals, which correlates with high levels of intelligence.

2. Advanced Communication Capabilities:

- a. Dolphins use a variety of sounds, including whistles, clicks, and pulses, to communicate with each other.
- b. They can identify themselves and other individuals by unique whistles, which are similar to names.
- c. Research shows that dolphins can understand and use simple syntax, indicating more advanced language abilities than previously thought.

3. Problem Solving and Learning:

- a. Dolphins demonstrate remarkable abilities in problem solving, both in the wild and in captivity.
- b. They can learn complex tasks through observation and imitation, and they can use tools to achieve their goals.
- c. For example, some dolphin populations use sea sponges to protect their snouts while foraging for food on the seabed.

4. Self-Awareness and Emotions:

- a. Dolphins show signs of self-awareness, such as the ability to recognize themselves in a mirror.
- b. They also show a variety of emotions, including joy, sadness, and empathy.

**Dolphin Mimic Ability:**

1. Vocal and Behavioral Imitation:

- a. Dolphins are known for their ability to mimic the sounds and behavior of other individuals.
- b. They can imitate the whistles of other dolphins, even those of other species.
- c. They can also imitate human movements and behaviors, such as jumping, spinning, and waving their fins.

2. Cultural Learning:

- a. Dolphins' ability to imitate plays an important role in cultural learning.
- b. Young dolphins learn important skills and behaviors from their mothers and group members through observation and imitation.
- c. This allows them to pass on knowledge and traditions from generation to generation.

**Human and Dolphin Interaction:**

There are 2 types of interactions between humans and dolphins, namely positive and negative interactions.

1. Positive Interactions:

Positive interactions with dolphins can provide therapeutic benefits to humans, such as reducing stress and improving mood. Dolphin-assisted therapy has been used to help people with conditions such as autism and post-traumatic stress disorder (PTSD). Interactions

between fishermen and dolphins, where dolphins help herd fish into fishermen's nets, demonstrate a mutually beneficial relationship.

## 2. Negative Interactions:

Negative interactions, such as captivity and training for shows, can cause stress and trauma to dolphins. Irresponsible tourism, such as swimming with dolphins in the wild, can disrupt their natural behavior and cause stress. Ocean pollution and climate change threaten dolphin populations and their habitats.

Research into dolphin intelligence and imitation has provided valuable insights into the evolution of cognition and social behavior. It has also raised awareness of the importance of conserving dolphins and their habitats. Although dolphins are highly intelligent, they are wild animals and are not suitable as pets. Keeping dolphins in captivity can cause significant stress and suffering to these animals. Dolphins are animals that require a lot of space to move around, and live in groups. Keeping dolphins as pets is illegal.

## CONCLUSION

This study revealed that Dolphins are one of the most intelligent animals in the world in communicating, so they are often used for circuses and therapy because of their ability to obey humans. Trainers interpret interacting with dolphins to do good for nature and others, by preserving protected animals, educating the public and helping people with autism and down syndrome. The trainer's willingness to interact is based on the trainer's love for animals, especially dolphins. Dolphins can also sometimes convey affective, both physical and emotional, felt by the trainer. The phenomenological experience of trainers communicating with dolphins uses several aspects of communication including verbal, non-verbal, object, and telepathic language. Verbal communication applies the same as communication between humans but plays a small role, while non-verbal communication plays a very large role in the form of gestures, objects and eye contact.

## REFERENCES

- Ardianto, E. (2010). *Metodologi Penelitian Untuk Public Relations Kuantitatif Dan Kualitatif*. Bandung: Simbiosis Rekatama
- Cresswell, J. (2010). *The Oxford Dictionary of Word Origins (2 ed.)*. New York, Amerika Serikat: Oxford University Press.
- Hardjana, A. M. (2003). *Komunikasi Interpersonal Dan Intrapersonal*. Yogyakarta: Kanisius
- Liliweri, A. (2011). *Komunikasi Serba Ada Serba Makna*. Jakarta: Kencana Prenada Media Group
- Merriam-Webster (2017). *Animal*. Diperoleh 6 September 2017 dari <https://www.merriamwebster.com/dictionary/animal>
- Mulyana, D. (2012). *Ilmu Komunikasi: Sebuah Pengantar*. Bandung: Rosda
- Robinson, I. (1995). *The Waltham Book of Human-Animal Interaction*. Oxford, Inggris: Pergamon.
- Sarwono, J. (2006). *Metode Penelitian Kuantitatif dan Kualitatif*. Yogyakarta: Graha Ilmu.
- Tasmara, T. (2000). *Menuju Muslim Kaffah: menggali potensi diri*. Jakarta: Gema Insani
- Walgito, B. (2003). *Psikologi Sosial*. Yogyakarta: Andi Offset.
- Wiji, U. (2012). *Inilah Rahasia Kecerdasan Lumba-lumba*. Diperoleh 27 Juni 2018 dari <http://sains.kompas.com/read/2012/06/27/10385953/Inilah.RahasiaKecerdasan.Lumbalu.mba>