



## **Analysis of the Peruvian wildlife pet trade phenomenon, According to the Social Learning Theory**

Francesca Mannucci

Corresponding emails: [Francesca.mannucci96@tiscali.it](mailto:Francesca.mannucci96@tiscali.it) & [info@sustainableamazon.org](mailto:info@sustainableamazon.org)

### **Abstract**

Observation plays a fundamental role in our learning process (Bandura, 1969). As Bandura argues in the Social Learning Theory, the repetitive exposure to the same condition can enhance the likelihood for the observer to replicate the condition in the future (Bandura, 1969). Although the illegal wildlife pet trade (IWPT) was banned in the 1973, it is still nowadays very common in Peru (Daut, Brightsmith, Peterson, 2015; Ricordi, 1974; Shane, 2012). This experiment was intended to investigate if the Social Learning theory conditions were applicable to the Peruvian IWPT, enabling further researches build upon it and have a deeper understanding of the phenomenon. Acknowledging the observation paradigm, it was conceived that Peruvians were frequently exposed to IWPT, and thus, more likely to imitate it in the future. This was a qualitative research meant to measure the extent of the participants' exposure to the IWPT and their consequent inclination towards it. All the participants were elementary school students who were tested using a drawing representing IWPT and two following questions on the topic. The results met the hypothesis encouraging further researches to create quantitative analysis that would guarantee a more precise understanding of the phenomena.

### **Introduction**

Behaviourism is a school of thoughts that was initially idealized by Pavlov and further on developed by Skinner in the second half of the 20<sup>th</sup> century (Bandura, 1969). Behaviourism defines human behaviour as the result of the repetitive exposure to the Stimuli-Response (S-R) paradigm or *Conditioning*, which is gained through the interaction with the environment. This learning process does not take in consideration internal mental states which are considered far too subjective (Bandura, 1969). In fact, it was thought that a person could be trained to perform any task regardless genetic predisposition, personal background or any internal mechanism (Bandura, 1969). In the late 60s, Bandura introduced the importance of observation in the development of human behaviour which was later described in his Social Learning Theory (SLT) (Bandura, 1969). According to SLT, human behaviour is not exclusively shaped by the personal experience of the S-

T paradigm, but it can also be influenced by its simple observation (Bandura & Walters, 1963). In other words, SLT claims that if over time the observer is exposed to the same condition or behaviour, which is associated with positive consequences, it is likely that the observation will have a strong influence on the observer's behaviour resulting its imitation (Bandura & Walters, 1963). Contrarily, if the condition observed is associated with punishment, it is unlikely that the observer will imitate the same behaviour (Heyes, 1993). However, observation does not imply predictability, which means that the observation of a specific behaviour does not ensure its imitation or avoidance in the future. In fact, other factors appear to interact and finally influence human behaviour, such as attention, memory and retention, which is why SLT is also often defined as a bridge between behaviourists and cognitive theories (Heyes, 1993). Lastly, Bandura highlights the dynamic nature of the learning process. More specifically, SLT is based on "reciprocal

determinism” which describes the way in which environment and behaviour constantly interact and influence each other depriving the process of the cause-effect paradigm (Heyes, 1993). In other terms, environment, and in this case its observation, acts on human behaviour which influence back the environment which changes as well (Heyes, 1993). This theory can be related to the Peruvian wildlife trade condition in terms of repetitive exposure to the same environment and consequent shaping of the observer’s behaviour resulting in imitation.

Peru is characterized by one of the richest megadiverse wildlife on earth (Daut, Brightsmith, & Peterson, 2015; Myers et al. 2000) and by one of the largest illegal wildlife-pet trade (IWPT) in the Latin America (Daut, Brightsmith, Peterson, 2015; Ricordi, 1974; Shanee, 2012). Between the 1960s and 1970, Peruvian IWPT rose along with the international demand for wild animals (Thomsen & Brautigam, 1991), and although the IWPT was banned later on, in 1973, a large number of wild animals such as, parrots, monkeys, sloths, owls, agoutis, caimans, and tortoises, have continued to be sold in local markets and commercialized as pets (Gonzales, 2003; Paredes and Mejia 2010; Antony C. Leberatto; 2016). After almost fifty years, wildlife-pet trade appears to (still) be deeply rooted in the Peruvian culture (Mendoza, 2008).

Therefore, it could be assumed that subjects such as children are frequently exposed to this environment, and thus, it is more likely that their behaviour will be shaped accordingly. It is hypothesised that the IWPT’s repetitive observation could lead them to imitate this behaviour in the future. IWPT’s observation is not considered as the only cause of its

imitation, however it is assumed to play a fundamental role in the children learning process. This experiment will not take into account all the variables introduced in the SLT. In fact, this investigation will not consider the internal mental states of the participants or the reciprocal behaviourism. In this sense, this analysis was inspired by the Bandura’s SLT, but it is not aimed at verifying its validity. Contrarily, its purpose is to gather basic information that will allow future research to investigate more in depth this topic.

Consequently, this experiment presents two main hypotheses. First, the majority of Peruvian children will be familiar to IWPT and, second, the majority of those who are familiar to wildlife trade imitate this behaviour in the future. The first hypothesis is meant to verify children’s exposure (observation) to IWPT, whereas, the second one is meant to measure children’s inclination towards the behaviour’s imitation.

*H1: The number of children who are familiar to IWPT is significantly higher than those who are not.*

*H2: The number of children who are familiar to IWPT and will imitate this behaviour in the future is significantly higher than those who are familiar to IWPT and will not imitate this behaviour in the future.*

## **Methodology**

This analysis was meant to investigate the relation between exposure/observation of a specific behaviour and its possible imitation. More specifically, this was the evaluation of Peruvian children’s exposure to IWPT and

their predisposition to imitate the same behaviour in the future. However, the descriptive statistical design does not allow any cause-effect statements. Therefore, this investigation was supposed to expand the knowledge on the topic, so future research could improve upon it.

*Participants*

The experiment was conducted as part of the internship program of the Alliance of a Sustainable Amazon organization, and thus, no credits or rewards were given in exchange. Participants were 24 students of the Monterrey middle school in Peru. The students were both female and male, within a range of 10 and 12 years old. All the students were originally from Peru, more specifically from the Madre de Dios region. All the student tested at the same time. Religious orientation was not taken into consideration since it was not relevant for the purpose of the experiment.

*Material*

The experiment’s material was formed by two sections. The first part consisted in a singular drawing, which represented a typical Peruvian courtyard, with a man in the middle of it. The man had a parrot tied up to his arm with a leash. The drawing had a brief introduction on the top to contextualize the image to the children: “Él es Pablo y tiene un lorito”.

The second section posited two questions which the children were required to answer by choosing between a “yes or no” answer. This section was delivered in Spanish. The first question was “¿Es esto común donde vives?”, which assessed the participants’ exposure to IWPT (yes= exposed, no= non exposed). The second question was “¿Quieres tú también tener un lorito cuando seas grande?”, which showed

participants’ inclination towards behavioural imitation (yes= inclined, no= not inclined).

*Design*

This analysis is based on a descriptive research design. More specifically, this experiment was focused on the frequency analysis of the exposure and the inclination towards imitation of participants.

*Ethics*

The experiment was conducted under the supervision of Johana Reyes Quinteros and Geoff G. Gallice, Alliance for a Sustainable Amazon’s director and president.

*Procedure*

The experiment lasted 2 minutes. Initially, a brief introduction was given in order to guide the children through the experiment (30 seconds). Then, the material was assigned to each child, giving them 5 minutes to observe the drawing and answer the two questions. However, participants completed the experiment in less than two minutes.

**Results**

A frequency statistics analysis was conducted in order to evaluate the percentage of participants exposed to IWPT (Question 1, Q1). 19 participants out of 24 answered yes to Q1 (Table 1).

**Table 1:** *Percentage of participants’ exposure to IWPT.*

Participants	YES	NO	% of participants’ exposure
Q1			
24	19	5	79

A frequency statistics analysis was conducted in order to evaluate the percentage of participants' inclination towards imitation of the same behavioural pattern of IWPT (Table 2).

**Table 2:** *Percentage of inclination towards imitation of those participants who were previously exposed to IWPT.*

Participants	Yes	No	% of inclination towards imitation of those participants previously exposed to wild animal pet trade
Q2			
19	18	1	95

Therefore, the analysis was focused on those participants who resulted to be previously exposed to IWPT (Q1). 18 participants out of 19 answered yes to Q2.

**Table 3:** *Percentage of inclination towards imitation of ALL participants.*

Participants	Yes	No	% of participants' inclination toward imitation
Q2			
24	23	1	96

## Discussion

According to Bandura, the repetitive exposure to the same stimuli over time enhances the likelihood of internalization and imitation of the stimuli itself in the future (Bandura, 1969). This experiment was aimed at having a clearer

understanding of the IWPT phenomenon in Peru, which was thought to follow the learning process paradigm introduced by Bandura. In fact, since it appears to be a common practice in Peru (Daut, Brightsmith, Peterson, 2015; Ricordi, 1974; Shanee, 2012), it was hypothesised that those subjects frequently exposed to this practice would be more likely inclined to imitate it in the future. More specifically, it was first hypothesised that a significant number of participants would result to be frequently exposed to the phenomenon, and that a significant number of participants, that were frequently exposed, would be more inclined to repeat it in the future. As *Table 1* and *2* indicates, both percentages are extremely high, and therefore, both hypotheses were met. Consequently, it could be concluded that the majority of the children were familiar with the IWPT phenomena and that the majority of those who were frequently exposed expressed the intention to imitate the same behaviour in the future. Accordingly, it appears that the exposure- imitation paradigm could explain this phenomenon and be used to take action against it in the future. However, this experiment revealed another significant result. In fact, as *Table 3* shows, not only the majority of those children who were previously exposed to wild animal pet trade were more inclined to repeat the same behaviour, but also the small percentage of those who were not exposed. These results were not considered as disproof of the Social Learning Theory, but instead, as indicator of and indirect exposure which could still work on the observer. In other words, it is argued that even though those children did not observe the IWAPT in their daily environment, they can still be frequently exposed to it through social media, canvas, books, and thus, still be

influenced. Further researches are required in order to draw a clearer consideration upon it. In conclusion, the majority of Peruvian children that were tested resulted to be exposed to the wild animal pet trade and appear to be generally inclined towards the imitation of the same practice in the future. Furthermore, the small percentage of “not-exposed” were still inclined towards IWAPT which could suggest the importance of indirect exposure for human learning process. Further investigations are needed in order to find clear inferences between observation of IWAPT and its imitation in Peru, and especially to have a deeper understanding of indirect observation’s importance on this topic.

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