# Pikukuh: Indigenous obedience of the Baduy people

Hendro Prabowo 1\*, Alia Rizki Fauziah 2, Aprillia Maharani Ayuningsih 3, Kenes Pranandari 4, Seto Mulyadi 5, Marcia Martha6

- <sup>1\*</sup> Universitas Gunadarma, Indonesia
- <sup>2</sup> Universitas Gunadarma, Indonesia
- <sup>3</sup> Universitas Gunadarma, Indonesia
- <sup>4</sup> Universitas Gunadarma, Indonesia
- <sup>5</sup> Universitas Gunadarma, Indonesia
- 1 hendroprabowo@staff.gunadarma.ac.id; 2 aliarizki@staff.gunadarma.ac.id
- 3apriliamaharaniayuningsih@gmail.com; 4 kenes@staff.gunadarma.ac.id; 5 marcia.siahay@gmail.com

| *Correspondent Author                 | 1200210   |  |  |
|---------------------------------------|---|--|--|
| KEYWORDS                              | ABSTRACT  |  |  |
| KEYWORDS  Modelling Obedience Pikukuh | Baduy is an indigenous community that lives in Leuwidamar subdistrict, Lebak Regency, Banten Province. The location is not far from the capital city of Jakarta, but this community rejects modernity. The Baduy people have a worldview in the form of pikukuh, an unchangeable instruction that, for Baduy people, is a customary prohibition that becomes a guideline for daily activities. This Pikukuh is based on the teaching of Sunda Wiwitan, the original belief of Baduy people. In practice, Baduy people should not change and should not violate everything in the forest and agricultural environment system where they live. This research is a qualitative case study with in-depth interviews and participant observation to explore the forms of indigenous obedience based on pikukuh and how to preserve it from generation to generation through modelling. |  |  |
|                                       | This is an open-access article under the CC-BY-SA license   |  |  |

# Introduction

Baduy is an indigenous community that lives in Leuwidamar sub-district, Lebak Regency, Banten Province. The location is not far from the capital city of Jakarta, but this community rejects modernity. The Baduy people have a worldview in the form of pikukuh, an unchangeable instruction that, for Baduy people, is a customary prohibition that becomes a guideline for daily activities. This Pikukuh is based on the teaching of Sunda Wiwitan, the original belief of Baduy people. In practice, Baduy people should not change and should not violate everything in the forest and agricultural environment system where they live. This research is a qualitative case study with in-depth interviews and participant observation to explore the forms of indigenous obedience based on pikukuh and how to preserve it from generation to generation through modelling.

The Baduy is an indigenous community living in the Kanekes, Leuwidamar sub-district, Lebak District, Banten Province. The village of Kanekes on Java island is about 170 kilometres from Jakarta and 38 kilometers from the city of Rangkasbitung, the capital district of Lebak and about 65 kilometers from the city of Serang, the capital city of Banten Province. Although it is not a remote area, this community is yet highly conservative. Baduy villages do not have electricity, health facilities and paved-road. The Baduy is a group of people who have never yet to want to receive a formal education even though the government has provided it. Baduy people reject education because formal education is considered to be used to fool other people (Sapri, orang Baduy Dalam, 2015). In fact, there are several different indigenous communities, such as the Ammatowa community in Kajang, South Sulawesi and the Orang Rimba community in Jambi, than the Baduy community. Although these communities are far from the capital city, they accept formal education provided by the government (Segar, 2008; Hijjang, 2014).

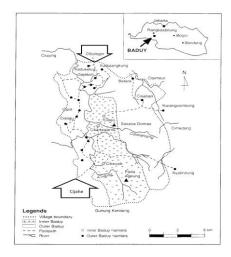


Fig 1. Map of Baduy Community

The Baduy community occupies an area of 5,101.8 hectares (2,101 85 hectares for settlements and 3,000 hectares for protection forest). In this region, there are 63 hamlets consisting of areas of the Inner Baduy, Outer Baduy and Exile Baduy (*Baduy Dangka*). The Inner Baduy region consists of three relatively unchanged hamlets: Cibeo, Cikartawana and Cikeusik. Meanwhile, the Outer Baduy region consists of 57 hamlets, and the Exile Baduy areas consist of 3 hamlets; the location of these two regions (Outer and Exile Baduy) surrounds the Inner

Baduy region. Out of Outer Baduy and Exile Baduy regions, two villages become gateways or borders with the outer regions of Kanekes, namely Cijahe in the south side and Ciboleger in the north side. Only in these two villages were there electricity and paved-road (Senoaji, 2011).

When it comes to a level of obedience to the custom, the Inner Baduy have higher levels than the Outer Baduy, and the Outer Baduy is higher than the Dangka Baduy. The Inner Baduy or *tangtu* is identified as the first place and predecessor, whether in heredity or the settlement's founder. The Outer Baduy or *panamping* originates in the word "*tamping*" which means 'throw away'. Thus, *Panamping* means 'disposal', a place for the Baduy people to be thrown away or expelled for violating a custom. Meanwhile, the word *dangka* means 'skeleton' or 'dirty', which is a place of disposal for Baduy people who break the tradition (Permana, 2009). Thus, the Inner Baduy have a higher social stratification than the Outer Baduy.

Generally, indigenous communities hold indigenous knowledge as well, that is, a knowledge system embedded in cultural traditions, including types of knowledge about traditional technologies (such as tools and techniques for agriculture and hunting), midwifery, ethnobotany and ecology, traditional medicine, celestial navigation, ethnoastronomy, climate, and so forth. These types of knowledge are crucial for the survival of an indigenous community and are generally based on the accumulation of empirical evidence and environment interactions. In some cases, traditional knowledge has been inherited orally from generation to generation from person to person through expressions in the form of stories, legends, folklore, rituals, songs, and laws (Kala, 2004; Kala, 2013; Turner, Ignace, & Ignace, 2000; Semali & Kincheloe, 2002). In its development, as indigenous knowledge is an effort to survive an indigenous community, this can also be a form of indigenous vocational and entrepreneurial education.

Indigenous vocational education means education providing practical or specific skills. A life skill is a skill or ability to adapt and behave positively, enabling a person to face various demands and challenges in life (Hopson & Scally, 1980). Vocational skills developing from childhood may affect the personal interests, beliefs and values in viewing the world and are decisive in determining the purpose of employment (Hartung, Porfeli, & Vondracek, 2005). Meanwhile, indigenous entrepreneurship education is defined as creating, managing, and developing new businesses by indigenous people for indigenous communities' benefit (Lindsay, 2005; Conway, 2011), focusing on the balance of cultural heritage and self-determination (Conway, 2011). Another characteristic indicating that indigenous

entrepreneurship is more holistic than entrepreneurship is that it focuses on economic and non-economic goals (Conway, 2011).

Of all this time, the Baduy people relied alone upon indigenous knowledge to withstand a modern era and population pressures. Generally, indigenous communities such as the Baduy community hold indigenous knowledge as well, which is a knowledge system that is rooted in the tradition of indigenous community culture, encompassing various types of vocational skills and indigenous entrepreneurship, an effort to create, manage and develop new business for their community benefit. Both are transmitted orally from generation to generation and from person to person through various ways. Based on some facts above, these research questions are:

- 1. What values underlie indigenous vocational and entrepreneurial education in the Baduy community?
- 2. What kind of learning process is applied to the Baduy community in indigenous vocational and entrepreneurial education?

#### Method

# Research Design

This study is a qualitative case study taken from Stakian's perspective, which is a study of the particularity and complexity of a single case (Yazan, 2015). This study seeks an understanding of indigenous vocational and entrepreneurial education in the Baduy community. The data were obtained from observations, interviews and documents.

# Participants and Procedure

The researchers reached Baduy village through Ciboleger on the north side and to Cijahe on the south side. After a permission letter (licence) to conduct research was given to the head of Kanekes village in the hamlet Kaduketug (Ciboleger access), the researcher decided to live together with local people in Cisadane village through Cijahe access. The researcher was accompanied by an informant named Kania, who is an Inner Baduy inheritance and currently lives in Bandung. It gives the researcher a lot of conveniences to get to know Baduy people in Cisadane and Cijahe Post. The researcher occupies the 'halfway house' owned by the informant, which is relatively close to Cikeusik and Cikartawana. By way of the informant, who was both an intermediary and translator, the researcher can interview some Inner Baduy people at the halfway house. The interview involved several children, accompanied by Kaman, a children's

supervisor. The interview was mainly conducted at night as Baduy people usually farm from morning to evening. Besides, the researcher was recommended to visit the chief from Cikeusik to get informal research permission. Direct observations of the daily lives of Baduy people and follow-up interviews were carried out in Cisadane village and Baduy neighbouring village.

While the data was collected through Ciboleger access, the researcher hired a guide from Inner Baduy to observe. From Ciboleger's access, the researcher decided to stay in the lodging owned by the local people in Keduketug village. In the lodging, the interview was conducted towards Ardan, a guide from Cibeo. Furthermore, direct observation of the daily lives of Baduy people and follow-up interviews were carried out from this hamlet and around villages.

#### **Data Collection**

The data was collected by observing, interviewing and documents. The researcher spent about a year visiting the Baduy community ten times and staying with the local community for about a week in one visit. Since it is the participant observation, the researcher lived with Baduy people and was involved in ceremonies, farming, shopping and recreation in the neighbouring Baduy village. A semi-structured interview was used according to the research questions. The data was collected based on observation and semi-structured interviews towards 11 participants. While the document analysis is to complete the limitations of other methods, this documentary evidence acts as a method for cross-validating information collected from interviews and observations.

The eleven participants involved were divided into three categorizations based on sociocultural status and place of living, which are:

Pseudonym Area Origin of Social status **Hamlet** 1. Alim Cikartawana Customary chief Cikeusik Community member 2. Saman Inner Baduy Kaman Cikartawana Children's guard 3. people Cikartawana 4. Salim Child of the traditional chief Ardan Guide 5. Cibeo Sajadi Head of Kanekes Village Kaduketug 6. 7. Kamidi Cisadane Indigenous security Cisadane Community member **Outer Baduy** 8. Didi people 9. Heri Kaduketug Community member, ex Outer Baduy\* Community member 10. Santi Cipaler

Tabel 1. Participant Classification

| Baduy<br>neighbouring<br>villager | 11. Haji Karni | Sareweh | Non-Baduy residents, land owner |
|-----------------------------------|----------------|---------|---------------------------------|

Description: \* Outer Baduy people who have left Inner Baduy

## **Trustworthiness**

Several methods were carried out in this study to achieve *trustworthiness*. We observed participants several times a week during a year to gain credibility (2016-2017). Through Cijahe's access, we lived together with the Baduy people in Cisadane and got closer to the Baduy community in the Cijahe Post. From Ciboleger's access, we lived near the Baduy community in lodgings rented by the locals. The research was conducted on two methods to achieve conformability. First, there is an agreement in interviewing from one person to another, whether they are the Inner Baduy, Outer Baduy, former Baduy, and non-Baduy residents. Then, the results were triangulated by direct observation in the field. The research employed data review, related literature, the researcher (informants) from the psychology field, and an anthropologist who did several kinds of research in Baduy community to achieve dependability.

# Data Analysis

The data was analyzed manually through categorical aggregations (Creswell, 1998). The information and observation from each interview transcript were numbered in paragraphs and then grouped into some themes. The researcher subsequently grouped them into several categories based on these themes. Several categories are obtained hierarchically, ranging from inner Baduy people, outer Baduy people, exile Baduy people, and non-Baduy residents, to find two categories with several themes; these categories were arranged chronologically, which are:

- 1. *Pikukuh* is a value underlying indigenous vocational and entrepreneurial education. It consists of two subcategories, which are: (a) indigenous vocational education in: agriculture, family involvement in agriculture, stable agriculture systems, and a shelter that is the second home for farming, recreation and social activities; (b) indigenous entrepreneurship education in: rejuvenating the idle land and migrating from neighbouring villages, wandering, sharing, and stable agriculture systems.
- 2. The learning process through experiential learning and observation.

Finally, these categories and themes were written in a narrative, including participant quotations and documentation results.

# Result

#### Pikukuh

The worldview of the Baduy community is led by *pikukuh*, a ceremonial which means "unchanged", which originated from their ancestors. *Pikukuh* is the basis for religious activities and the daily life of the Baduy community. It mainly contains *buyut* (taboo), not recorded as text but inherited in the oral culture. It is subsequently manifested in the daily life of Baduy people to interact with each other and the natural environment. The *Pikukuh* consists of two values:

- 1. The Values of the natural environment, including the balance and natural environment, must be maintained. Another restriction aspects are: the mountain shall not be melted; the valley shall not be destroyed.
- 2. The values of morality are to maintain proper human behaviour consisting of honesty, politeness in speaking, purity, unchanging truth and consequences of greed or violating the taboo.
  - a. Honesty includes a ban on stealing and restrictions on taking without knowingly
  - b. Courtesy includes a prohibition on speaking painfully and haphazardly and a suggestion to think before speaking
  - c. Chastity includes the prohibition of dating and adultery
  - d. The truth that never changes includes the phrase: "The length shall not be cut short" and "The short shall not be connected."
  - e. The greed will result in loss of leadership, honour, magic, authority and influence.

These values above are the basis of vocational and entrepreneurial education, so taboo "irreversible" and fears of greed might be held. A participant called Alim stated, "...even though we do not go to school, we should understand and obey the ceremonial in living our life and in the balance of taking care and handling of the natural environment, but we do not learn bad knowledge that may make yourself greedy...How the Baduy people educate their children is growing awareness of the need for their life.... in the form of natural schools, which means that the way people care for, maintain, save and how to use the forest not to be damaged. Thus the results can be used to fulfil sustainable needs."

## **Vocational Education**

The Baduy people's primary occupation is a farmer. The data shows that 100% of the Inner Baduy people were farmers in 2009, 98.6% of husbands and 90.7% of wives worked as farmers (Khomson & Wigna, 2009). The Baduy's agriculture is based on *pikukuh*, such as: sustaining seeds from their ancestors, growing rice on dry land with no irrigation, using the agricultural calendar of Baduy people, using slash-and-burn systems, and fertilizing the soil. The rice produced cannot be sold and must be stored properly to fulfil their needs.

The uses of land for agriculture and forest is as well arranged by dividing the five types of land that it "does not change", which are: *Communal fields* are communal land for the ceremony in Inner Baduy; *Chief field* is the field owned by the chief of the Inner Baduy; *Inner Baduy field* is the field providing for the needs of the Inner Baduy people; *Paragon field* is the communal field used for the ceremony in the Outer Baduy; and *Outer Baduy field* is the field for the needs of the Outer Baduy people.

Based on researchers' observations in the field, the Baduy people farm every day from the morning at 06.00 to the afternoon at 17.00. They sell handicrafts, utilize their forests, make thatched roofs, and make palm sugar and agricultural tools for living. Several activities are prohibited in the Inner Baduy, such as processing palm sugar and planting woody trees, coffee, and cloves. Apart from helping their husbands in the field, Baduy women weave their main clothes in their spare time.

Baduy children aged 5-6 years or considered physically strong are almost always involved in agricultural activities or other work. One of the participants, named Salim said that he taught his son to hold a machete by the age of 4. After he thought his son was strong enough by the age of 5 years, Salim then invited his son to walk around 4 - 5 kilometres. Thus, Baduy children will be invited to travel miles away if their parents consider them strong enough to walk. Salim added that he was asked to travel with his parents since he was five years old.

While the researcher was observing in the Cijahe Post at 6:00 a.m., some parents and their children walked to the field carrying food and sickles. A mother and her daughter walk towards the field, where the mother carries a big sickle and the child carries a small sickle as well. Besides, the observation shows in Heri's house that he and his son (13 years old) just returned from their field in Kaduketug hamlet at 5:00 p.m. They raised chunks of wood from the fields to their home through the uphill road.



Fig 2. Two girls go to the field with her mother



Fig 3. The boy picks up the wood after farming

When it comes to agriculture, Baduy people generally build some shelters made from planting to harvest. These shelters are their second home as all agricultural activities are carried out here by almost all family members (father, mother and children) from morning to evening. When Baduy fathers and sons are in the rice field, their mothers and wives prepare food for them that has been brought from home or cooked at the shelter. Sometimes these shelters are more populated than their first homes in the hamlet. These shelters are wooden stilt houses with a leaf roof as well as wall and floors. These shelters can be overhauled to new fields when opening new fields.

Meanwhile, if Baduy children have not yet reached 5-6 years old, they do not participate in agricultural activities but stay at home or shelter with their grandparents. Karena dianggap belum kuat secara fisik untuk berladang. They teach his grandchildren to do some activities,

especially agriculture. The observation shows that in the Cisadane hamlet at 08.00 in the morning, two adult men (Didi, a father and Bao, a grandfather) made a roof from a leaf for the shelter. This roof is woven by a stick and palm leaves separated from the midrib and pieces of bamboo. Meanwhile, Ahmad (Didi's son) was looking at his father and grandfather, who worked at the shelter. The distance between their house in Cisadane hamlet and the shelter is about 3 kilometres.



Fig 4. Baduy boys watched his father and grandfather making a roof at the shelter

On Friday and Sunday, they are on holiday. They used those days for social and recreational activities. On holiday, boys are able to recreation in groups with neighbouring Baduy villages by buying food or watching television in stalls, especially in Cijahe and Ciboleger. Sometimes they are also accompanied by their father or grandfather. So do Baduy girls. At some point, these Baduy children are also involved by their parents in trading activity at the market.

Salim said, "Sometimes I bring children to the market to sell bananas and coconut. We also buy daily needs, such as cooking oil or salted fish." Besides, Baduy children are allowed to buy snacks or watch television in stalls close to the market. Salim and their three sons usually go to Nangerang market, Ciboleger market or Cijahe Post in the afternoon. The distance between the market and Cikartawana hamlet is about 4 kilometres, or it takes 2 hours to walk. Meanwhile, if we go to Ciboleger market, it takes about 4 - 5 hours to walk, and to Cijahe Post is only 1 hour.

# **Entrepreneurial Education**

To outgrow the population growth and lack of available land, Baduy people look for vacant land outside Kanekes village to do agricultural activities by profit sharing and purchasing the land. Their farming activity is the same as the method used in Baduy region. They bring their

children as well while they are farming. Several wood species not allowed to plant in the Baduy region, such as Albasia and Mahogany trees and other crops, such as mangosteen, coffee and cloves, can be planted in the Outer Baduy and neighbouring Baduy villages. The way of "wandering" is only allowed for the Outer Baduy people.

The difficulty of finding labour outside the Kanekes community was caused by a few people who migrated to the city and became Indonesian Migrant workers (TKI), providing an opportunity for the Outer Baduy people. Some unemployed woodland owners were offered to work the land to the Outer Baduy. The Baduy people who agreed to work on the ground also planted rice among the trees. Harvest wheat is harvested once a year. Even if the soil is fertile, it can happen twice every year. As for trees, they are generally harvested once every five years. Rice yields are generally enjoyed 100% by Baduy people. The tree harvest is divided with the landowner.

One of the landowners outside Kanekes is Haji Karni, who owns land in the Saraweh hamlet, Karang Nunggal village, Cirinten sub-district along 2.1 hectares. Because no one worked on it, this land was offered to the Outer Baduy people and cultivated by the three of them. The trees planted include cloves, Albasia wood, and mangosteen. They have cultivated on the land for three years. Haji Karni's brother named Haji Satar has 1 hectare of land located in front of the Haji Karni land as well. There are chicken farms cultivated by locals and three shelters for Outer Baduy people to farm.

By having some money from this additional income, they save a lot of money by buying gold chunks. It is because there is no access to the bank. They believe the locals offer the land with a piece of gold. Whether cultivating somebody else's land or theirs, Baduy people build shelters for staying a while or a few days. Thus, they can go back and forth from the hamlet to the shelter and vice versa. They even choose to stay a few days at the shelter, which is the furthest distance, 15 km from the hamlet. In this way, the Baduy people can still survive by wandering in a spread direction to do agriculture. According to Sajadi, the land for agriculture beyond Kanekes was registered that 1.000 lands had received the certificate of freehold title in 2011 in five subdistricts, namely Bojong Manik, Muncang, Cirinten, Leuwidamar, and Sobang. Meanwhile, those who worked on other people's land were in the Cileles, Gunung Kencana, Cimarga, and Sajira areas.

For example, Kamidi has 8 locations successfully bought in the Cirintren, Cibarani, Kebun Cau, and Karang Nunggal areas, by width from 600m<sup>2</sup> to 10,000m<sup>2</sup>. In these locations, Kamidi build a shelter for growing rice, then the shelter is moved to another location, and so on.

# Learning Process with Experiential Learning and Observation

The education Baduy people teach their children is related to traditionally practised skills, especially agriculture. The method of teaching is generally taught by imitating older people. Alim stated that initially, Baduy girls would learn from their grandmothers, while boys learn from their grandparents outside their homes. However, after they are about 5 - 6 years old, their parents shall teach Baduy children agriculture.

On the contrary, children learn from their parents by looking at the sample carefully and then imitating it. We were together with the Batubeulah people working on a bamboo bridge (about 50 meters long, and it was built again because the old bridge was rotten) to connect the hamlet and Cikartawana. The observation shows how Baduy people work. There were about 50 people in Batubeulah and about 40 people in Cikartawana. They start working from 08.00 in the morning to noon. Dozens of people were in the tree, tying the bamboo enthusiastically. Many children were also present in this work from Batubeulah and Cikartawana. There were ten children from Batubeulah and ten children from Cikartawana as well. They saw the example from adults. They were present and witnessed how their fathers worked. They keep an eye on their fathers and pay attention. At certain times they come to work, such as tying bamboo, picking up bamboo, and so on. They seem to pay close attention. There are no scenes where their fathers give any instructions to their children.

Based on field observation, since the age of 5 years, Outer Baduy girls began to learn to weave. In their hamlets, it is common to watch some girls keep an eye on their mother weaving sarongs or scarf. Moreover, several children under five observed their sister (who was 6 years old) knit the scarf as well. According to Santi (40 years old), her daughter, Lina, who is 13 years old, weaved dozens of sheets of scarf and sarongs. By the time she was 5 years old, Lina could already knit sarongs and scarves. At first, Lina just sat and watched her mother weave. Lina was then given a loom and began to weave herself and immediately got it. "Children simply see me weaving, then try, and can," said Santi, who was met by the researcher at her house in Cipaler. While the cloth is sewn in four days, a scarf is finished in a day. When the observation was conducted, Santi and Lina were weaving with their looms. The same activity can be seen in the surrounding houses as well. Lina's looms are smaller in size than those used by Santi.

#### **Discussion**

The values in *pikukuh* are inherited by the Baduy community to maintain harmony, namely human relations with each other and nature. As the sanction is applied to children and adults breaking the custom, several values are still in effect. To the Baduy children breaking the custom, they were told and reminded again about common law in a forum. Meanwhile, adults must be "expelled" from the Inner Baduy to the Outer Baduy or vice versa as outsiders and live outside Kanekes. These characteristics are similar to Javanese.

According to Suseno (2001), the characteristic of Javanese culture lies in its uniqueness allowing it to be flooded with waves of culture from outside and inside the river. It stays the same. Hildred Geertz (quoted in Suseno) states that in the association of Javanese society, there are two main rules: in every human situation, it should behave so as not to cause conflict. Second, it requires that people speak and carry themselves and always show respect for others according to their degree and position. Therefore, there are two main principles in Java public life, namely: harmony and respect (Suseno, 2001)

In addition, society and nature have been the sphere of life of Javanese people since childhood. Through the community, the Javanese relate to nature. Natural rhythms, such as the rainy and dry seasons, determine the community's daily life and its entire planning. For Jawa people, society means a source of security and power of nature, lived as a power that determines its salvation and destruction. Javanese people implement this unity of society and supernatural to respect their ancestors, such as paying a visit to their ancestors' graves.

Society, nature and supernatural belief are considered a united entity and revealed in the belief that all natural empirical phenomena relate exactly to the meta-empirical phenomenon. If a conflict arises, it will disrupt social harmony, and the cosmic then shall endanger ourselves and other members of society. For Javanese people, human beings must maintain the social and cosmic order (Suseno, 2001).

The education for Baduy children is the education of traditional vocational and entrepreneurial skills. The education is taught through examples provided by parents to children. In accordance with the observational learning theory of Bandura (Bandura, 1999), a learning process is performed by looking at the behaviour of others or an example. Based on the development of his theory in the process of observation, it was carried out by involving aspects of cognition where children acquire knowledge by imitating the behaviour taught by parents so that they could find innovation or create according to what they knew before (Boyd, Richerson, & Henrich, 2011).

The learning process begins with observing Baduy parents around their house. Then, they invited their children to the farm at the shelter. Both are done by looking at the example carefully and then imitating it. Bandura postulated that cognition plays an essential role in the learning system. The people observed are called models, and the learning process is called modelling. Bandura also states that the next stage of imitation and modelling will occur if one observes and gets positive results from the first stage (Bandura, 1999). The skills gained through this observation process allow the Baduy community to maintain this learning process continuously.

Besides, Baduy children are taught entrepreneurship through an observation learning process. This learning process refers to Bandura's social cognitive learning theory, which relates to the role of the family in shaping individual entrepreneurial interests, especially the role model of behaviour, which is an essential factor in creating self-interest and experience (Devi, Khandelwal, & Das 2017). When Baduy girls began to learn to weave scarf from age 5, the process was carried out through observing their mothers and sisters.

Many skills are taught to the children of the Baduy tribe by their parents in their daily lives. Baduy children aged 5-6 years or considered physically strong are almost always involved in agricultural activities or other work. As taught, holding a machete in the air, boys aged 4, walk along the 4-5 kilometres, lifting chunks of wood, etc. This method of learning is also known as the term experiential learning. Itin defines experiential learning as a process occurring between teachers and students that grow the direct experience with the environment and the learning essence (Itin, 1999), where the experience can involve students to reflect on their actions to acquire the knowledge and develop the skills and abilities of students (Dirkx & Lavin, 1991). Dei also explains that when a child does not realize that he is being taught but they learn by seeing and doing something directly, it is a part of experiential learning (Dei, 2011).

Kolb's learning theory model, which explains this learning process, focuses on "reflection", meaning experiential learning. It is a concept of learning that focuses on experience reflection. Without reflection on experience, students continuously make the same mistakes (Kolb, 1984). The essence of Kolb's theoretical model is in describing the learning process. It is described as a cycle of phases shown by how experience is changed through reflection on ideas and concepts, which is then used for an active experiment and an option for new experiences. Therefore, the Experiential Learning Theory (ELT) could be applied in formal schools and almost every aspect of life (Kolb, 2015).

Experiential learning emphasizes frequent experiences of direct senses and actions as the primary source of learning. There is often a role for the individual's own thinking, analyzing and academic knowledge. Educational techniques such as hands-on practice, problem-based learning or teamwork and lifelong learning are often understood as learning from life experiences that the individual has mastered. (Kolb DA, 2004)

Kolb added that when students are fully involved in the learning cycle, an opportunity shall be provided in four-cycle modes: feeling, reflection, thinking and action. These allow students to be responsible for their learning and have time to repeat the practice to develop their skills (Kolb & Kolb, 2005).

The learning process of following, observing and imitating the Baduy community was similar to other indigenous communities. The Kwara'ae, in the Solomon Islands, learn through observation, imitation, participation, and trials (Ninners, 1996). Learning Aboriginal children suggests that they learn through observation and then examine it in real life without direct orders (Sayers, 1988). The Embu people in Kenya also carried out parental involvement in their children's education. Before certain ceremonies, boys and girls are under maternal care. After that, boys are placed under the guidance of fathers, while girls live with their mothers to learn through role-playing, imitation, and observing (Kenyatta, 1965).

The agriculture system conducted by the Outer Baduy community in the area outside the customary land is a form of indigenous entrepreneurship, which is the creation, management and development of new businesses by indigenous people for the benefit of indigenous people (Hindle & Lansdowne, 2005). This effort is to survive, not merely an economic motive. It is also a unique community-indigenous (Gallagher & Lawrence, 2012 and its objectives are economical and non-economic (Lindsay, 2005). Indeed, this way also happens to other indigenous communities. For example, Aboriginal entrepreneurship in Canada is unique in its purpose: to end dependency, create economic independence, and strengthen their traditional culture (Anderson & Giberson, 2004). In Maori, New Zealand and Aborigines, Canada, their land ownership and common law belong to non-individual communities, and the results are marketed in internal economic activities without transactions (Dana, 2015). Meanwhile, in the Sami community in Europe, entrepreneurship is to defend themselves and their way to survive (Ronning, 2007).

#### References

- Anderson, R. B., & Giberson, R. J. (2003). Aboriginal entrepreneurship and economic development in Canada: Thoughts on current theory and practice. In *Ethnic entrepreneurship: Structure and process* (pp. 141-167). Emerald Group Publishing Limited.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual review of psychology*, 52(1), 1-26.
- Boyd, R., Richerson, P. J., & Henrich, J. (2011). The cultural niche: Why social learning is essential for human adaptation. *Proceedings of the National Academy of Sciences*, *108*(Supplement 2), 10918-10925.
- Conway, D. M. (2011). Promoting Indigenous Innovation, Enterprise, and Entrepreneurship through the Licensing of Article 31 Indigenous Assets and Resources. *SMUL Rev.*, *64*, 1095-1110.
- Creswell, J. W., & Poth, C. N. (2017). *Qualitative inquiry and research design: Choosing among five approaches*. Los Angeles: Sage publications.
- Dana, L. P. (2015). Indigenous entrepreneurship: an emerging field of research. *International Journal of Business and Globalisation*, 14(2), 158-169.
- Dei, G. J. S. (2011). Defense of official multiculturalism and recognition of the necessity of critical antiracism. *The Association for Canadian Studies and the Canadian Ethnic Studies Association*, Ontario, 2011, 15-20
- Devi, B., Khandelwal, B., & Das, M. (2017). Application of Bandura's social cognitive theory in the technology enhanced, blended learning environment. *International Journal of Applied Research*, 3(1), 721-724.
- Dirkx, J., & Lavin, R. (1991, October). Learning from experience in adult education: The four-thought model. in *Midwest Research-to-Practice*, St Paul, 1991.
- Gallagher, B., & Lawrence, T. B. (2012). Entrepreneurship and indigenous identity: a study of identity work by indigenous entrepreneurs in British Columbia. *International Journal of Entrepreneurship and Small Business*, 17(4), 395-414.
- Hartung, P. J., Porfeli, E. J., & Vondracek, F. W. (2005). Child vocational development: A review and reconsideration. *Journal of Vocational Behavior*, 66(3), 385-419.
- Hijjang, P. (2014). Pasang dan kepemimpinan Ammatoa: Memahami kembali sistem kepemimpinan tradisional masyarakat adat dalam pengelolaan sumberdaya hutan di Kajang Sulawesi Selatan. *Antropologi Indonesia*, 29(3), 255-268. 2014.
- Hindle, K., & Lansdowne, M. (2005). Brave spirits on new paths: toward a globally relevant paradigm of indigenous entrepreneurship research. *Journal of Small Business & Entrepreneurship*, 18(2), 131-141.
- Hopson, B., & Scally, M. (1980). Change and development in adult life: Some implications for helpers. *British Journal of Guidance and Counselling*, 8(2), 175-187.
- Iskandar, J., & Ellen, R. F. (2000). The contribution of Paraserianthes (Albizia) falcataria to sustainable swidden management practices among the Baduy of West Java. *Human Ecology*, 28(1), 1-17.
- Itin, C. M. (1999). Reasserting the philosophy of experiential education as a vehicle for change in the 21st century. *Journal of Experiential Education*, 22(2), 91-98.
- Kala, C. P. (2013). Traditional ecological knowledge on characteristics, conservation and management of soil in tribal communities of Pachmarhi Biosphere Reserve, ndia. *Journal of Soil Science and Plant Nutrition*, 13(1), 187-199.
- Kala, C. P., Farooquee, N. A., & Dhar, U. (2004). Prioritization of medicinal plants on the basis of available knowledge, existing practices and use value status in Uttaranchal, India. *Biodiversity & Conservation*, 13(2), 453-469.
- Kenyatta, J. (1965). African socialism and African unity. African Forum, 1(1), 23-37.
- Khomsan, A., & Wigna, W. (2009). Sosio-budaya pangan suku Baduy. *Jurnal Gizi dan Pangan*, 4(2), 63-71.
- Kolb, A. Y., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning & Education*, 4(2), 193-212.
- Kolb, D. A. (1984). Experience as the source of learning and development. New Jersey: Prentice Hall.

- Kolb, D. A. (2015). Experiential learning as the science of learning and development, 2nd ed. New York: Pearson Education, Inc.
- Lindsay, N. J. (2005). Toward a cultural model of indigenous entrepreneurial attitude. *Academy of marketing Science review*, 2005, 1.
- Ninnes, P. (1996). Informal learning strategies in the Solomon Islands Department of Education and Professional Studies. In *School of Education, Social Science South Building, Flinders University Adelaide, Australia*.
- Permana, R. C. E. (2009). Masyarakat Baduy dan pengobatan tradisional berbasis tanaman. *Wacana*, 11(1), 81-94.
- Ronning, L. (2007). Entrepreneurship among Sámi reindeer herders. In L. Dana and R. Anderson. *International handbook of research on indigenous entrepreneurship*. Cheltenham: Edward Elgar Publishing.
- Sager, S. (2010). The sky is our roof, the earth our floor: Orang Rimba customs and religion in the Bukit Duabelas region of Jambi, Sumatra. Ph. D Dissertation. Australian National University
- Sayers, B. J. (1988). Left or right brain: Is there a neurological relationship to traditional Aboriginal learning styles. in Learning my way, Papers from the National Conference on Adult Aboriginal learning, B. Harvey and S. McGinty, Ed. Australia: WACAE, 1988, pp. 238-248.
- Semali, L. M., & Kincheloe, J. L. (2002). What is indigenous knowledge?: Voices from the academy. New York: Routledge.
- Senoaji, G. (2011). Perilaku masyarakat Baduy dalam mengelola hutan, lahan, dan lingkungan di Banten Selatan. *Jurnal Humaniora*, 23(1), 1-15.
- Suseno, F. M. (2001). Etika Jawa: Sebuah analisa falsafi tentang kebijaksanaan hidup Jawa. Jakarta: PT Gramedia Pustaka Utama.
- Turner, N. J., Ignace, M. B., & Ignace, R. (2000). Traditional ecological knowledge and wisdom of aboriginal peoples in British Columbia. *Ecological Applications*, 10(5), 1275-1287.
- Yazan, B. (2015). Three approaches to case study methods in education: Yin, Merriam, and Stake. *The Qualitative Report*, 20(2), 134-152.