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Urban vs Rural: The Young Generation's Understanding of the Lexicon of Subak (Balinese Traditional Irrigation System)

I Gede Suwindia

STAH Negeri Mpu Kuturan, Singaraja, Indonesia, windia_gede@yahoo.com

Abstract

This study aimed at exploring the lexicon of Subak which defines as the traditional Balinese Irrigation System written in the Balinese texts and at analyzing the Balinese young generation's understanding of the lexicon. This research was conducted using a mixed-method research model with an exploratory sequential design. Qualitative data were collected through documentation and interview techniques. The researcher collected eleven ancient manuscripts and interviewed five informants, two ancient manuscript experts, and three Subak leaders, who were selected using a purposive sampling technique. Quantitative data was collected using a test on the Subak lexicon to 100 high school students in cities and 100 students in villages. These students were selected using simple random sampling. The collected qualitative data was analyzed using an interactive data analysis model. While the qualitative data from the test results were analyzed using descriptive statistics and t-tests. This study found that there were 110 lexicons which were grouped into five categories, namely: management of subak, rituals, tools and techniques for planting rice, animals and plants in rice fields, and traditional Balinese rice field infrastructure. In terms of the young generation's understanding, it was found that there was a significant difference between the understanding of students in the village and the city, which means that the location where they live affects the understanding. Even though the different levels of understanding differed significantly, in general, their understanding was still relatively low. From these findings, it can be concluded that Subak has various special lexicons, but the younger generation of Bali does not understand these lexicons well.

Keywords: Lexicon, Language defense, Culture defense, Irrigation system, Subak.

1. Introduction

Bali island was known as an agricultural area where most of the population worked as rice farmers. Understanding the importance of water in the process of rice plantation, the Balinese ancestors created a traditional irrigation system known as subak. Subak is managed in groups to ensure that each farmer gets water fairly so there are no conflicts over water (Okura et al., 2022). Subak organization conducts water management to fulfill the farming needs by implementing tri hita karana and Balinese Hindu teachings (Risna et al., 2022). Tri hita karana is a concept that teaches humans to keep balance in the relationship between human and God, human and human, and human and nature (Anggana et al., 2022; Pickel-Chevalier & Budarma, 2016; Wijayanti et al., 2020).

Subak should be one of pride for the Balinese people because it is officially acknowledged as the world's inheritance in 2012 by UNESCO (Mas'ad, 2019). This acknowledgment proves that Subak is a valuable culture that deserves to be preserved. But in reality, along with the times and population, the rice fields in Bali have changed their function to become tourist areas and residential areas (Roth, 2014; Sutawa, 2012). The area of paddy fields in Bali decreases every year and is converted into buildings (Suputra et al., 2012). Therefore, the number of Balinese who work as farmers is also decreasing. In 2013 the number of farmers in Bali was 515,864 people, while in 2018 it decreased to 477,439 people (BPS Provinsi Bali, 2013, 2018).

In general, in Indonesia, the interest of the millennial generation to become farmers has decreased significantly (Ngadi et al., 2023). Specifically for Bali, the availability of new jobs, especially in the tourism sector, has reduced the interest of the young Balinese generation to become farmers (Artini et al., 2020). With the increased number of Balinese that works outside the agricultural sector, it tends to make the less understanding of Subak by the Balinese. This is because those who understand Subak are usually farmers, and those who work in other sectors generally lack or even do not understand Subak (Prastyadewia et al., 2020).

The situation has been acknowledged by the researchers. It pushes some to investigate information regarding Subak. Windia et al. (2015) conducted research for ritual documentation conducted by Subak organization in ricefields management. The research was limited to the name of the ritual's identification and its definition. Artajaya et al. (2016) conducted documentation research and compared the quality of urban and rural areas of Subak ritual implementation. Their research succeeded in documenting the Subak ritual and found that the quality between the two areas was different. In rural areas, Subak implementation was better than that in urban areas. Permadi and Kuasuma (2016) developed illustration

media for the Subak system introduction for the Balinese young generation. It was unfortunate that the research was only limited to media creation that was not continued to the socialization stage, and that the effectiveness of the media in introducing the system was not tested. Arta (2018) realized that the Balinese started to leave the agricultural sector so he conducted research to record written the vocabulary related to Balinese traditional ricefield and the Subak itself. Therefore, the study was limited to Canggu village which today has changed into a tourism area. Therefore, the study was only able to take notes on twenty-three vocabularies related to the rice fields.

From the previous research, a conclusion can be developed that research on subak is still limited to recording rituals, rice field vocabulary, and media development to introduce subak. Until now, no research has been conducted to look at the Balinese understanding of subak. The fact encourages the research to identify lexicons associated with Subak and how the Balinese people, especially the younger generation of Bali, understand these lexicons. Lexicon identification will be a record of Subak existence and its related matters. A lexicon can be interpreted as a collection of vocabulary or terms related to a particular field (Yuniawan et al., 2020). Lexicon becomes an important thing to preserve Subak as a culture, seeing that a language cannot be separated from culture and vice versa (Budasi et al., 2021).

The subak lexicon is used as knowledge dissemination material about Subak. Furthermore, identification of the Balinese generation's understanding of the lexicon can provide an overview of the condition of subak as a concept. This understanding of the younger generation can provide factual information about whether subak as a concept can still survive. Considering that language is a recorder of culture when the language regarding that culture is no longer used or understood, it shows that the culture has been abandoned and tends not to be able to survive. This study aimed at exploring Subak lexicons and the analysis of the Balinese young generation's understanding of the lexicons.

2. METHOD

From the type of data and data analysis performed, this research can be categorized into a mixed-method research model. Specifically, this research was carried out by following an exploratory sequential design. Exploratory sequential design means that the research begins with collecting funds for qualitative data analysis and then is followed by collecting and analyzing quantitative data based on the results of the qualitative analysis that has been done previously (Creswell, 2009).

The qualitative data was collected through documentation and interview. The researcher collected eleven ancient texts about Subak and interviewed five informants. The documentation data collection was conducted by reading and taking notes on the data based on the written sources The informants were two ancient text experts and three Head of Subak who were chosen by purposive sampling technique. Interviews were conducted using semistructured interview techniques aimed at confirming data obtained from documentation and obtaining more detailed information. The collected qualitative data was then analyzed using the interactive data analysis model, which was carried out in three stages: data reduction, data display, and conclusion drawing/verification. (Miles et al., 2014). The result of the qualitative data analysis is the identification of the lexicon associated with Subak.

Additionally, to gain quantitative data to identify the Balinese young generation's understanding of the lexicons of Subak, therefore, the lexicons identified were developed into objective tests. Before being utilized to collect data, the objective test was tested to ensure its validity and reliability. After being proven to be valid and reliable, the test was distributed to 100 high school students in the cities and 100 students in the villages. Thus, there were 200 high school students representing the Balinese young generation. The research sample was selected using simple random sampling from two different high schools. The results of the test objectives were therefore tabulated and analyzed quantitatively to determine differences in students' understanding of cities and villages. Data tabulation is done by converting student scores to the range of 0-100.

The students' scores were then analyzed using descriptive statistics. The next step would be categorized based on the interval made by using the assessment theory of theoretical ideal. The formula for determining the students' interval categorization based on the theoretical ideal can be seen in Table 1.

Table 1. The Theoretical Ideal Reference Assessment Criteria

No	Interval	Category
1	(MI + 1.5 SDI) < X	Very High
2	(MI + 0.5 SDI) $\leq$ X < (MI + 1.5 SDI)	High
3	(MI – 0.5 SDI) $\leq$ X < (MI + 0.5 SDI)	Moderate
4	(MI – 1.5 SDI) $\leq$ X < (MI – 0.5 SDI)	Low
5	X (< MI – 1.5 SDI)	Very Low

Note:

MI = 1/2 (ideal maximum score + ideal minimum score)

SDI = 1/6 (ideal maximum score - ideal minimum score)

Based on the theoretical ideal reference assessment criteria, the researcher determined the result of the questionnaire based on the criteria category in Table 2.

Table 2. The Categories for the Samples' Score

Score	Category
75 < x	Very High
58 ≤ x <75	High
42 ≤ x < 58	Moderate
25 ≤ x < 42	Low
X < 25	Very Low

After the descriptive statistical analysis was carried out, the researcher continued the analysis using the t-test analysis to see whether the group of students' score differences between the village and the cities showed any difference. However, before analysis using the t-test, researchers conducted normality tests and homogeneity tests to ensure that the data were normally distributed and homogeneous. Statistical descriptive analysis, normality test, homogeneity test, and t-test were carried out using Microsoft excel and SPSS 20.0 for Windows. Furthermore, researchers also used quantitative data to find out how big the effect size of the location of the young Balinese generation is on their understanding of the Subak lexicon. The effect size calculation was conducted by using Cohen's d formula. The calculation results were then converted according to the criteria proposed by Cohen (1998) shown in Table 3.

Table 3. Effect Size Category

Effect size	Cohen's d (standard deviation unit)
Small	.2
Medium	.5
Large	.8

3. RESULTS

Subak Identification of Lexicon

To identify Subak lexicons, then the researcher read and conducted document analysis by reading and taking notes on the Subak lexicons from the 11 ancient texts (lontar). The 11 ancient texts namely, Lontar Sri Purana Tattwa, Lontar Aji Pari, Lontar Pratingkahing Mwang Magaga Sawah, Lontar Usadha Carik, Lontar Pawurung Pantun, Lontar Tattwa Cacarikan, Lontar Uma Tattwa, Lontar Tingkah Makarya Ring Pratiwi, Lontar Sri Tattwa, Lontar Dharma Pamaculan 2, Lontar Puja Amretekaning Pari. Apart from these ancient manuscripts, the researcher also interviewed two ancient manuscript

experts and three subak leaders to help interpret the meaning of the ancient manuscripts and add information that researchers needed. From the results of document analysis and interviews, 110 subak lexicons were found which could be grouped into five categories, subak management, ritual ceremonies, farming tools and techniques, animals and plants in rice fields, and infrastructure in traditional Balinese rice fields.

Table 4. Lexicon of Subak Management

No	Lexicon	Meaning
1.	*Undangi Pengarung*	Tunnel maker
2.	*Prajuru subak*	Subak management
3.	*Pakaseh (klian gede)*	Subak leader
4.	*Petajuh*	Subak deputy leader
5.	*Kesinoman or juru arah*	Information carrier
6.	*Kelian*	Leader
7.	*Krama*	Member
8.	*Tempek, munduk, empelan*	smaller groups/regions incorporated in one subak organization
9.	*Penyarikan*	Subak leader's secretary
10.	*Patengen or juru raksa*	Subak leader's treasurer
11.	*Kelian tempek*	Leaders of small groups part of the Subak organization
12.	*Krama pengayah*	Active member
13.	*Krama pengampel or Krama pangoot*	Passive members are members who replace their obligations with money
14.	*Krama leluputan*	Special members who are exempt from their duties and obligations because they have certain positions in traditional villages
15.	*Awig-awig subak*	Subak regulations
16.	*Sangkep*	Meeting
17.	*Salah*	Fine
18.	*Perarem*	Joint decisions of subak members who are used as regulations
19.	*Bale subak*	The place used to do various joint activities, such as meetings and agricultural extension activities
20.	*Bale timbang*	A useful place to hold an informal meeting with fellow Subak members

According to Table 4, there are 20 lexicons related to subak management. The lexicon includes the terms used to refer to the

positions in the subak organizational structure, types of subak members, and terms for meetings and regulations applied in subak organizations. Compared to the total number of lexicons, the subak management lexicon contributes as much as 18.2% of the total identified lexicon. These lexicons illustrate the relationship between subak members and when associated with Tri Hita Karana concept, as the basis of subak, the lexicons represent human relations with humans or the concept of pawongan. From several previous studies, it was found that the existence of subak organizations was effective in preventing and overcoming conflicts regarding the distribution of irrigation water (Heryanda et al., 2021; Risna et al., 2022; Sriartha & Giyarsih, 2017). The presence of a clear organization structure, alongside the regulations, will help effective and efficient organizational performance (Kraiger, 2001; Torabi & El-Den, 2017).

Table 5. Lexicons of Ritual Ceremony

No	Lexicon	Meaning
1.	*Ngendagin, ngendag,*	Understandably to God (gods who reside in rice fields, as a manifestation of God,), that farmers will start carrying out agricultural activities in the fields
2.	*Piodalan*	The Yadnya ceremony held by the Subak members to commemorate the Subak Temple anniversary hold every 6 months
3.	*Ngawiwitin*	Prayer to God, so that the seeds sowing can grow well
4.	*Nuasen nandur*	Prayer to God, so that the process planting seeds can run smoothly
5.	*Ngulapin*	Prayer to God, so that the seeds planted rice can grow well, and not experiencing damage.
6.	*Ngeroras*	Prayer to God so that rice plants can grow with good after the rice plant is 12 days old.
7.	*Biukukung/ miseh/ngiseh*	Prayer to God rice plants can grow with Good after 70 days of rice.
8.	*Nyiwa Sraya*	After the rice flowers evenly in the stretch of rice fields. Pray to God so that rice plants can still grow and produce good fruit.
9.	*Ibu pertiwi*	Lexically can be interpreted as the mother of land, which is the term to purify or respect the land that has supported humans

No	Lexicon	Meaning
		who are considered mothers of all living things
10.	*Betara Sri*	The Goddes of Paddy
11.	*Ngusaba nini*	Just before the harvest to thank the gift of the Goddes of Sri for protecting and saving plants
12.	*Mendak toya*	Pray to God that irrigation water is sufficient for the crop.
13.	*Ngurit*	The ritual performed when farmers start making
		PAD seed nursery
14.	*Nandur/Ngwiwit*	Rituals carried out in the fields before
		Plant rice seeds
15.	*Mabuwihin/neduh*	Rituals carried out after 15 days of planting
		paddy
16.	*Mabanten tulung*	The ritual is carried out when the rice is 27 days old
17.	*Nyasihin/ngebulanin*	The rituals carried out when the rice is
		35 days old
18.	*Kekambuan*	This ceremony is performed when the rice is 42
		day
19.	*Miseh/ngiseh*	The rituals carried out when rice began to grow well
		and will enter the ritual of pollination
20.	*Mabiukukungan*	The ritual is carried out in the period of two months in Bali or equivalent to 70 days
21.	*Ngendag dewa nini*	The ritual was carried out intending to make a symbol of Ida Bhatara Sri which is characterized by giving thanks and happiness to God Almighty in its manifestation as a Cri Sedana because it has made a forest and mountain, so there is water that gives blessings to rice being farmer business
22.	*Manyi*	The ritual is carried out at the time of the rice harvest to give thanks to Ida Bhatara Sri
23.	*Ngungnghang pantun ring lumbung*	Rituals carried out in rice or barn storage
24.	*Nedunang pantun saking lumbung*	This ritual is to ask the grace of God in his manifestation as Ida Bhatara Sri to give a gift to the rice that is stored
25.	*Nyimpen beras ring pulu*	The ritual when the rice that is stored has been ground into rice, the rice is the

No	Lexicon	Meaning
		embodiment of Bhatara Manik Galih, which will be saved in Pulu (Balinese rice storage lexicon).
26.	*Nanggluk merana*	The ritual when the rice that is stored has been ground into rice, the rice is the embodiment of Bhatara Manik Galih, which will be saved in Pulu (Balinese rice storage lexicon).
27.	*Mendak dewa nini*	The rituals are carried out when the rice that has been harvested has been taken to the house of the farmer
28.	*Mralina dewa nini*	The rituals carried out when the rice stored dilated is old or the remains of the rice grains left behind in the barn are burned and the ashes are planted in a ricefield
29.	*Pura subak*	A temple to worship God in the subak region
30.	*Sanggah catu*	Sanggah, a place to put offerings, is made of bamboo and plugged in upstream of rice fields (pangalapan), if there is a ceremony in the rice fields then it is installed
31.	*Pura Bedugul*	Temples, sacred buildings, which are located in a pool or water divider
32.	*Pura ulun empelan/ulunswi*	The place of worship of the God of Vishnu or Goddes of Gangga, as the gods of water, to ask for fertility and safety of rice fields

From Table 5, It can be seen that the lexicon about rituals is the most common lexicon, which is 32 lexicons. In other words, the lexicon regarding rituals contributes as much as 29% of the total number of Subak lexicons. The lexicon about this ritual is the most common. The data shows that farmers in Bali perform various rituals following the teachings of Balinese Hinduism from starting to plant seeds to the rice harvest. In general, the ritual is addressed to Dewi Sri or Dewa Nini as the Goddess of the Fertility of Dewi Gangga and Dewa Wisnu, as the Goddess of Water and God of Preservation, and Motherland as the ruler of land/land. The ritual is generally carried out to ask for safety for rituals carried out from planting seeds to the seeds growing and producing rice and thank the rituals carried out when the harvest is carried out.

Although the lexicon regarding ritual is the most in the Subak lexicon that was successfully identified, the ritual lexicon is the most difficult lexicon for the young generation of Bali. That is because those who are usually actively involved in the implementation of the ritual are the farmers of subak members who are old or married. However, seeing the conditions where the number of farmers is decreasing in Bali, and the emergence of the phenomenon of the use of seasonal

workers from Java to work on rice fields in Bali, then an understanding of subak rituals is important to be explained to the young generation of Bali. Considering that if all rice fields were worked on by the seasonal workers from the island of Java, the rituals will also be lost, because the ritual is a ritual in Balinese Hinduism, while the seasonal workers from Java are almost all non-Hindu. They certainly cannot be forced to perform these rituals because they have different beliefs.

Table 6. Tools and Techniques of Paddy Farming

No	Leksikon	Makna
1.	*Anggapan*	Traditional tools for cutting rice
2.	*Arit*	Sickle
3.	*Caluk*	Long knife with a curved tip
4.	*Srampang*	A tool for hoeing with a long-stems
5.	*Tenggala*	Traditional tools for plowing rice fields
6.	*Tambah*	Tools for hoeing
7.	*Camok*	Whip
8.	*Capil*	Farmers' Hats made of Janur
9.	*Lelakut*	The Scarecrow
10.	*Gerejag*	Tools such as large chairs that function as stairs to reach high parts
11.	*Manyi*	Harvest rice
12.	*Majukut*	Pull/eliminate disturbing plants
13.	*Matekap*	Plowing
14.	*Udud*	A tool for hoeing with a short stalk
15.	*Lampit*	racket
16.	*Keranjang*	Storage devices from bamboo that are reviewed
17.	*Gelebeg*	A place to store rice
18.	*Alu*	Rice pounding tool in the form of a wooden stick
19.	*Lesung*	Containers made of stone used to pound rice

Based on the data obtained, as shown in Tabel 6, the research found 19 lexicons Regarding traditional rice farming tools and techniques in Bali. These tools are traditional tools that do not use machines so they are environmentally friendly. This is following the concept of Palemahan in the Tri Hita Karana concept. Where humans should maintain good relations with nature by not polluting the environment. But unfortunately, some of these types of devices are no longer used and are replaced by tools using machines. Tengala has been replaced using a tractor. Likewise, with pestle and mortar which has been replaced with a rice slip machine. Farming tools that use machines are economically more profitable because they are more efficient in terms of reducing the amount of labor and the time

required. Modernization in agriculture is difficult to avoid considering that it has a positive impact in terms of productivity and economy for farmers. For this reason, the recording of the lexicon and farming techniques can help the language and culture contained therein.

Table 7. Animals and Plants in the Ricefield

No	Lexicon	Meaning
1.	*Kakul*	Snail
2.	*Bikul*	Mouse
3.	*Kapu-kapu*	Kiambang
4.	*Pici-pici*	Small snail
5.	*Lintah*	Leech
6.	*Kedis perit*	Sparrows
7.	*Katak*	Frog
8.	*Balang*	Grasshopper
9.	*Capung*	Dragonfly
10.	*Blauk*	Dragonfly children
11.	*Godogan*	Big frog
12.	*Lindung*	Rice field eel
13.	*Klipes*	insects that live in freshwater
14.	*Becing-becing*	Beradu
15.	*Lipi*	Snake
16.	*Sampi*	Cow
17.	*Godel*	Calves
18.	*Kokokan*	Bird
19.	*Kebo*	Buffalo
20.	*Okokan*	Bells made of wood that is worn by cows

The number of lexicons identified for the animals and plants category is 20, which means that the lexicons in that category contribute to 18.4%. The animals identified are the kind of the farmer's helpers in managing the ricefield, such as cow, buffalo, and the pests such as mice and rice field conch. The data reveals that some animal names are known widely by the Balinese young generation. However, some are not. The reason behind this is the animals' names are rarely used and are mostly replaced by Indonesian. This finding also shows that the Balinese language is gradually being replaced by Indonesian. The result of the present study supports the previous research's finding that shows how the Balinese language is increasingly put under a recessive context compared to Indonesian and English. For this reason, the introduction of Balinese animal names needs to be done to prevent the words for these animal names from being lost. Because words can be lost when no one uses the word anymore because it has been replaced with words from another language and

speakers have made substitute words as words used in communication.

Table 8. The Infrastructure of Traditional Ricefield

No	Lexicon	Meaning
1.	*Huma*	Ricefield
2.	*Tegalan*	Field
3.	*Tembuku galeng*	Dam
4.	*Kilan*	The sluice to divide the water is made of wood the size of an adult's hand span
5.	*Carik*	Ricefield
6.	*Pundukan*	Paddy fields
7.	*Tembuku*	pond
8.		
9.	*empelan*	Dam
10.	*Aungan*	tunnel
11.	*Telabah gede/telabah aya*	primary channel to drain rice field irrigation water
12.	*Telabah pemaron gede*	Secondary channels that irrigate certain parts of the subak
13.	*Telabah pemaron cenik*	tertiary channel is the smallest channel
14.	*Telabah pengalapan/telabah penyakcah*	quaternary canals that irrigate one or more paddy fields
15.	*Talikuda/samakuda*	canal that distributes irrigation water fairly for one elbow of paddy fields
16.	*Telabah pengutangan*	excess irrigation water
17.	*Tembuku aya*	the main irrigation building on the primary canal
18.	*Tembuku pemaron*	secondary divider building as well
19.	*Tembuku pemaron cenik*	located on the secondary channel
20.	*Tembuku pengalapan*	tertiary dividing buildings and as a place to collect irrigation water for several rice field elbows

Table 8 shows that in this study 19 lexicons were found related to traditional Balinese rice field infrastructure. These lexicons relate to the division of rice fields and irrigation canals. These lexicons have also become difficult lexicons for the Balinese generation. This indicates that the younger generation of Bali rarely knows what is in the rice fields. In addition, these findings also show that the younger generation of Bali is less interested in matters related to agriculture.

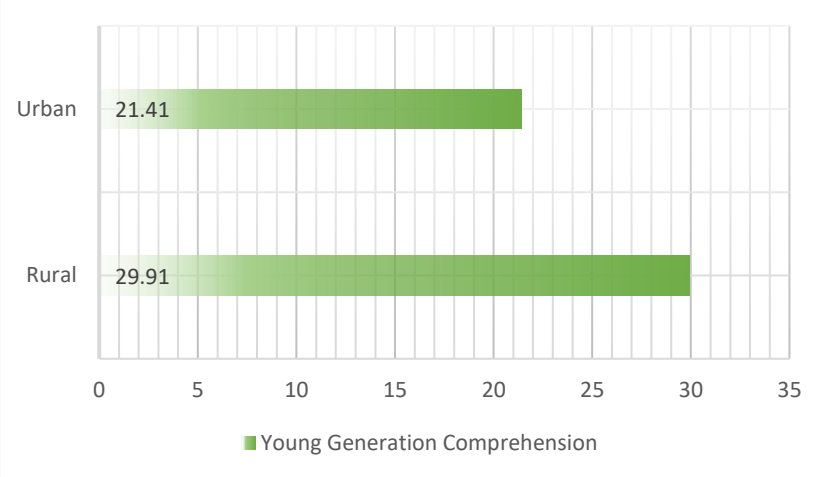
The Balinese Young Generation's Understanding of Lexicons of Subak

The Balinese young generation's understanding is seen from the understanding of two groups of high school students. One group of students consists of 100 students from high schools in rural areas and one group of students totaling 100 students from high schools in urban areas. The researcher used these two groups of students to compare the understanding of the Balinese youth in the village and the Balinese youth in the city. The following are the results of data analysis derived from the results of objective tests regarding the understanding of the subak lexicon of the two groups of students.

The Balinese Young Generation from Rural Area and Urban Area

The Balinese young generation's understanding can be seen from the results of the objective tests distributed to high school students in villages and cities. The results of the objective test were then compared to find out the differences between the understanding of the younger generation in the city and the village, considering that there are more rice fields in the village. Thus, it is assumed that those who live in villages tend to have a better understanding than those who live in cities. The results of the objective tests given to students in cities and villages can be seen in Figure 1.

Figure 1. The Descriptive Statistic Results of the Balinese Young Generation's Understanding



The results of the descriptive statistics shown in Figure 1 reveal that the Balinese young generation who live in villages have a better understanding of the subak lexicon compared to the ones that live in cities. However, viewed from the understanding level of categories of the younger generation in cities and villages (Table 9), it is known that no one has a high understanding. In the village, most of the

Balinese young generation have a low understanding. Whereas in the city, most of them have a very low understanding.

Table 9. Score Category

Category	Percentage	
	Village	City
Very Low	19%	66%
Low	78%	44%
Moderate	3%	0%
High	0%	0%
Very High	0%	0%

The Effect of Residence Location on the Balinese Young Generation's Understanding of Rural and City Areas

To identify the significant differences in understanding between the Balinese Young Generation, the researchers conducted a different test using the t-test. However, before analyzing data on the understanding of Balinese young people in villages and cities using the t-test, researchers conducted prerequisite tests in the form of normality and homogeneity tests. The following are the results of the normality and homogeneity tests of the two data.

Table 10. Normality Test Results

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kota	0.055	100	0.200	0.980	100	0.129
Desa	0.066	100	0.200	0.980	100	0.140

According to the normality test shown in Table 10, it can be seen that the data on the Balinese Young Generation's understanding based on their residences such as villages and cities proves to be normally distributed. This can be seen from the .sig value for the Kolmogorov-Smirnov and Shapiro-Wilk formulas for the two data groups are higher than .05. If the sig. below .05 then, the data is declared normally distributed. Therefore, the data is tested for the next prerequisite test stage, namely the homogeneity test. The homogeneity test results can be seen in Table 11.

Table 11. The Homogeneity Test Results

Levene Statistic	df1	df2	Sig.
0.052	1	198	0.820

Based on the results obtained in the homogeneity test as shown in Table 11, it can be said that the two data proved to be homogeneous. This can be seen from the value of Sig. which proved to be higher

than .05. Thus, the data is declared homogeneous and ready to be analyzed for the analysis phase using the t-test.

Table 12. T-test Result

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Pemahaman	Equal variances assumed	.052	.820	9.225	198	.000	8.500	.921	6.683	10.317
	Equal variances not assumed			9.225	197.828	.000	8.500	.921	6.683	10.317

The results of the t-test shown in Table 12 show that there is a significant difference between the younger generation's understanding of both the village and the city. These results confirm that the younger generation in the village has a better understanding of the subak lexicon than the younger generation in the city. Furthermore, to find out how much influence the differences in living location of the generation an analysis is carried out by calculating the effect size using Cohen's d formula.

From the Cohen's d formula calculation, it was found that the value of Cohen's d is 1.305 (higher than 0.8), which means that the residence location is categorized as big towards the young generation's understanding of the Subak lexicons. The result is supported by the reality that more ricefields and subak organizations are available in the village. More people are working as farmers in villages than in cities. Thus, it is more likely that the students' parents in the village are farmers than those who live in cities. Thus, the children's knowledge in the village regarding rice fields and subak is better than those from the city.

This finding is in line with the declining interest of the millennial generation to become farmers (Ngadi et al., 2023). Especially in Bali, the new job availability, especially in the tourism sector, has reduced the interest of the Balinese young generation to become farmers

(Artini et al., 2020). The more Balinese working outside of the agricultural field, the less they understand Subak. This is because those who understand subak are usually farmers, and those who work in other sectors generally lack or even do not understand subak (Prastyadewia et al., 2020).

Subak must be a pride for the Balinese since it is acknowledged as one of the world's heritage in 2012 by UNESCO (Mas'ad, 2019). This acknowledgment proves that Subak is a valuable culture that deserves to be preserved. But in reality, along with the times and population, the rice fields in Bali have changed their function to become tourist and residential areas. (Roth, 2014; Sutawa, 2012). The area of rice fields in Bali decreases every year and is converted into buildings (Suputra et al., 2012). Therefore, the amount of Balinese who work as farmers also decreasing.

4. Conclusion and Recommendations

Subak has various types of the lexicon used in subak management, rituals, tools and techniques for growing rice, animals and plants of the rice fields, and traditional Balinese rice field infrastructure. Second, the understanding of the Balinese young generation in the urban and rural areas is significantly different. The younger generation in the village has a better understanding than the younger generation in the city. However, in general, the understanding of the younger generation in villages and cities is still low. Thus, based on the results of this study, the Balinese government is recommended to make efforts to disseminate the Subak lexicon to maintain the existence of Subak conceptually. For dissemination to the younger generation, this can be done by inserting subak material in Balinese language subjects and providing learning media based on information and communication technology. Furthermore, considering that this research is still being carried out with a limited number of samples, it is also important to carry out further research using a larger number of samples to obtain a more comprehensive picture of community understanding. In addition, the addition of variables such as age and gender variables are also important.

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