



## PREFACE

All Praises to be Lord for the gracious mercy and tremendous blessing that enables me to accomplish this proceedings, with special theme of **Achieving Strategy and Inspiring in the New Normal Era**, 新常态时代的成就策略与启发 (xīn chángtài shídài de chéngjiù cèlüè yǔ qǐfā). The International Webinar has been organised by Faculty of Education UNHI, STAB Maitreyawira, and STAB Nalanda in Chinese and English.

On behalf of the committee, we would like to apologize for being late in launching the proceedings.

We would also addressed our appreciation to our beloved authors. because of you this proceedings also published. This is special for all of you. We would like you to enjoy reading this proceedings. we hope this may be beneficial for your future researches.

Denpasar, June 3, 2021

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## INTERNATIONAL WEBINAR

ACHIEVING STRATEGY AND INSPIRING IN THE NEW NORMAL ERA

STRATEGI BERPRESTASI DAN MENGINSPIRASI DI ERA NEW NORMAL

新常态时代的成就策略与启发 (XIN CHANGTAI SHIDAI DE CHENGJIU CELUE YU QIFA)

| SATURDAY, MARCH 6<sup>th</sup> 2021 | LIVE AT  | 

# PROCEEDING BOOK

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RIDA JELITA., S.H., M.H

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# PROCEEDING

VIRTUAL

International Webinar with special theme of  
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**新常态时代的成就策略与启发**

(xīn chángtài shídài de chéngjiù cèlüè yǔ qǐfā)

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**Achieving Strategy and Inspiring in the New Normal Era**

新常态时代的成就策略与启发 (xīn chángtài shídài de chéngjiù cèlüè yǔ qǐfā)

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## Preface

International Webinar Welcome

Om Swastyastu, Namo Buddhaya, Asallam walaikum warahmatulahi wabarokatuh, Salam sejahtera untuk kita semua.

My honorable Chairman of STAB Nalanda, Mr. Dr. Muljadi, Chairman of STAB Maitriyawira, Mr. Hosan, Rector UNHI Prof. Dr. Drh I Made Damriyasa. whom we respect Mr. Madan Cheng, Mr. Hu Chuanqiu, Mr. Maher Mahmoud Mohamed Sedam as speaker, Mr. Sindhu Gitananda, Miss Martina, and Miss Natalia, as moderator, and attendees happy participants of the webinar.

We, as the committee, welcome the attendees here. Our webinar today will discuss the topic "Achieving Strategy And Inspiring in the New Normal Era" and this Webinar will be for all people without exception, because during this pandemic there have been many changes in all fields. Whether in the fields of education, arts and culture, science and technology, health, economics, social, and others.

With the changes that have occurred, people are no longer able to hold social gatherings. The role of science and technology is getting closer to its function to bridge the process of human life which ultimately cannot run normally. very important and interesting to discuss.

This Webinar aims to develop science in each field so that it can be socialized and listened to. It is also hoped that more broadly, topics of thought will emerge that can be used as important data to support the development of education, arts, culture, health and Informations Technology in the future.

The output of this webinar is in the form of online and offline writing (proceedings) which can be used as evidence of the participation of intellectuals in building this nation. Therefore, on this day together we will listen to presentations from experts from various countries in accordance with their respective fields. What will be delivered by Mr. Madan Mariani, Mr. Hu Chuanqiu, Mr. Maher Mahmoud Mohamed Sedam, and furthermore, the event will be continued with a question and answer session.

Happy audience, we hope that this Webinar will run well and smoothly. For that, let's pray to God, may God bless us all. We also express our gratitude to all of the attendees who have participated in this event. Of course we also do not forget to apologize profusely if there are things that do not work either in the opening or in the implementation of the webinar later. That is all from me. Thank you for your attention, I end with paramasanti

Om Santih, santih, santih,Om.

Namo Budaya. Salam sejahtera untuk kita semua. Assalam walaikum warahmatulahi wabarokatuh.  
Denpasar, March 2021

**Prof. Ida Ayu Gede Yadnyawati., M.Pd.**  
Dean of Faculty of Education In UNHI





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# Data Mining Techniques & Tool

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## ABSTRACT

Data mining is the computational process of discovering patterns in large data sets involving methods at the intersection of artificial intelligence, machine learning, statistics, and database systems.

The overall goal of the data mining process is to extract the knowledge and pattern from a data set and transform it into an understandable structure for further use.

*Keywords: Data Mining, Techniques, Tool*

### Some Key techniques for data mining

Below are some important data mining techniques that have been developed and used in data mining projects: [1]

1. Classification

Classification technique is used to obtain important and relevant information about data and metadata, this data mining technique helps to categorize data in different classes or labels [2], and it is widely used for prediction purpose. For example, using the classification technique to classify a website whether it is in “legitimate” or “phishy” class labels based on a classifier model built from the training data.

2. Tracking patterns

This is a useful technique for recognizing trends or patterns, often used over longer-term data [1]. For example, we can identify the spike in the sales of flight ticket just before the holidays.

3. Association rules

Association rules technique is used to determine the relationship between events, items, or attributes, or co-occurrences in a dataset [8]. For example, searching for relationships



of several products in a purchase transaction, such as we might identify that the consumers always buy jams when they buy bread.

#### 4. Regression

Regression is used to predict a numeric value for a dependent or outcome variable based on the values of a set of predictors or independent variables in a particular dataset [7]. For example, predicting the value of a used car, given other variables (mileage, age, etc).

#### 5. Clustering

Clustering is used to group data elements based on their similarities, similar to classification. But, unlike classification, clustering is an unsupervised learning technique [6] that only interprets the data input and creates clusters of data points based on similarity. For example, to identify groups of houses and apartments by type, value, etc.

#### 6. Prediction

Prediction is used with other data mining techniques for recognizing and analyzing historical trends to predict what will happen in the future [1]. For example, analyzing data on individual clients' financial backgrounds and spending histories to predict credit risk in the future.

#### 7. Anomaly or Outlier detection.

The observation and identification of data points in a dataset that does not match an expected pattern. It shows that something out of the ordinary has occurred and requires more attention [1]. For example, anomaly detection is used in the intrusion detection system.

Classification is a supervised learning approach, in which we already have some ideas or knowledge of what the output or outcome for our samples should be. In supervised machine learning, we teach or train the machine using data that is well labeled, and then the machine is provided with a new set of data so that the supervised learning algorithm analyses the set of training data and produces a correct outcome from labeled data. In other words, it models the relationship between the target output or outcome and the input features such that we can predict the output values for new data based on those relationships learned from past data.



The classification technique can be used in a variety of domains, such as:

1. Car classification (sedan, SUV, truck, etc) by identifying its attributes (dimensions, number of seats, wheels, etc).
2. Credit risk classification (low, medium, or high credit risk) by evaluating data on individual clients' financial backgrounds and spending histories.
3. Medical diagnosis, predicting if the patients have a certain disease or not based on their data (age, gender, symptoms, etc)
4. Customer conversion prediction (buy or not buy) based on a set of variables, including customers' interaction with emails, such as emails received, clicks, and open rate.

Predicting whether the given email is spam or not.

There are a lot of classification algorithms that can be used, but we can not conclude which one is better than the other, it depends on the type of application and data set.

Following are the most commonly used classification algorithms: [3][4]

1. Logistic Regression
2. k-Nearest Neighbor (KNN)
3. Decision Trees
4. Support Vector Machine (SVM)
5. Naive Bayes
6. Random Forest
7. Artificial neural networks

There are 3 main types of classification tasks:

1. Binary Classification
  - a. Classification with only 2 class labels or 2 possible outcomes, one class that is the normal state and another class that is the abnormal state. [5]
  - b. For example, email spam detection (spam email or non-spam email).
  - c. Some popular algorithms that can be used for binary classification are as below:
    - Logistic Regression
    - K-Nearest Neighbor (KNN)
    - Naïve Bayes
    - Decision Trees
    - Support Vector Machine (SVM)



## 2. Multi-Class Classification

- a. Classification with more than 2 (two) distinct classes or possible outcomes. [5] For example, classification of types of animals (dog, cat, bird, etc)
- b. Popular algorithms that can be used for multi-class classification include:
  - K-Nearest Neighbor (KNN)
  - Naïve Bayes
  - Decision Trees
  - Random Forest
  - Gradient Boosting

## 3. Multi-Label Classification

- a. Unlike binary classification and multi-class classification where a single class label is predicted for each example, multi-label classification tasks have two or more class labels where one or more class labels may be predicted for each example. [5]
- b. For example, photo classification where a photo may have multiple objects, multi-label classification model may predict the presence of multiple known objects in the photo, such as dog, cat, bird, etc.

We can not use classification algorithms that are used for binary classification and multi-class classification directly for multi-label classification, we have to use multi-label versions of the algorithms, such as:

- Multi-label Random Forests
- Multi-label Gradient Boosting
- Multi-label Decision Trees

## **Some Tools for storing, analysing and data mining structured data**

### **1. Python**

Python is an open-source programming language that integrates systems more effectively, it is one of the most popular programming languages used in data science, mainly because of the following reasons:

- Python has an amazing selection of libraries (NumPy, Pandas, SciPy, scikit-learn for machine learning applications, Matplotlib and other data visualization libraries, etc) [9]
- Python is reliable, efficient and multi platform support
- Python makes big data analytics faster, efficient and effective.



## 2. Jupyter Notebook

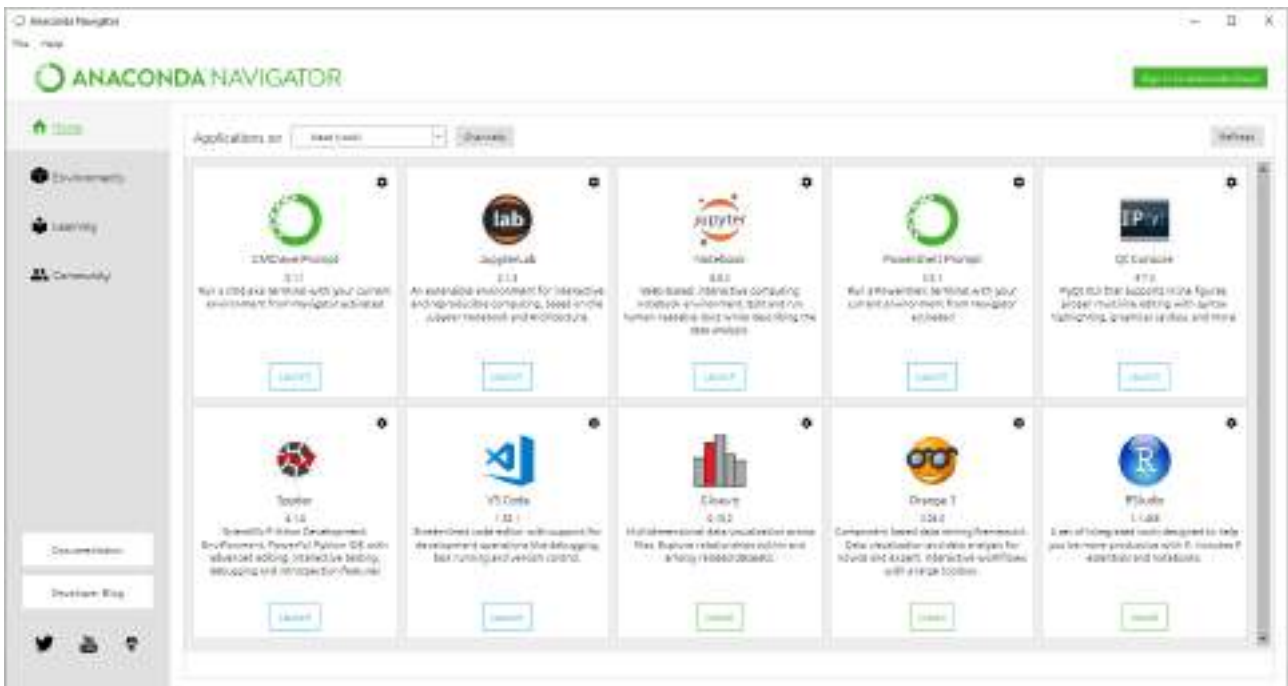
The Jupyter Notebook is an open-source web application that allows you to create and share documents that contain live code, equations, visualizations and narrative text. The Jupyter notebook is a powerful tool for developing and presenting data science projects interactively, it provides the ability to perform data visualization in the same environment. [10]

The Jupyter notebook is one of the most popular tools in data science, it supports dozens of programming languages including Python.

## 3. Anaconda

Anaconda data science tool kit is an open-source distribution, it is the most widely used Python distribution for data science and comes pre-loaded with all the most popular Python libraries and tools, including Jupyter Notebooks. [11]

Below is the screenshot of Anaconda:



## 4. PostgreSQL

PostgreSQL also known as Postgres, is an enterprise class open-source database management system with a well reputation for speed, reliability, flexibility and support of open standards. It supports both SQL for relational and JSON for non-relational queries. [12]

How to install postgresQL on Windows and how to connect to PostgreSQL using Python from websites are listed in reference. [13][14]

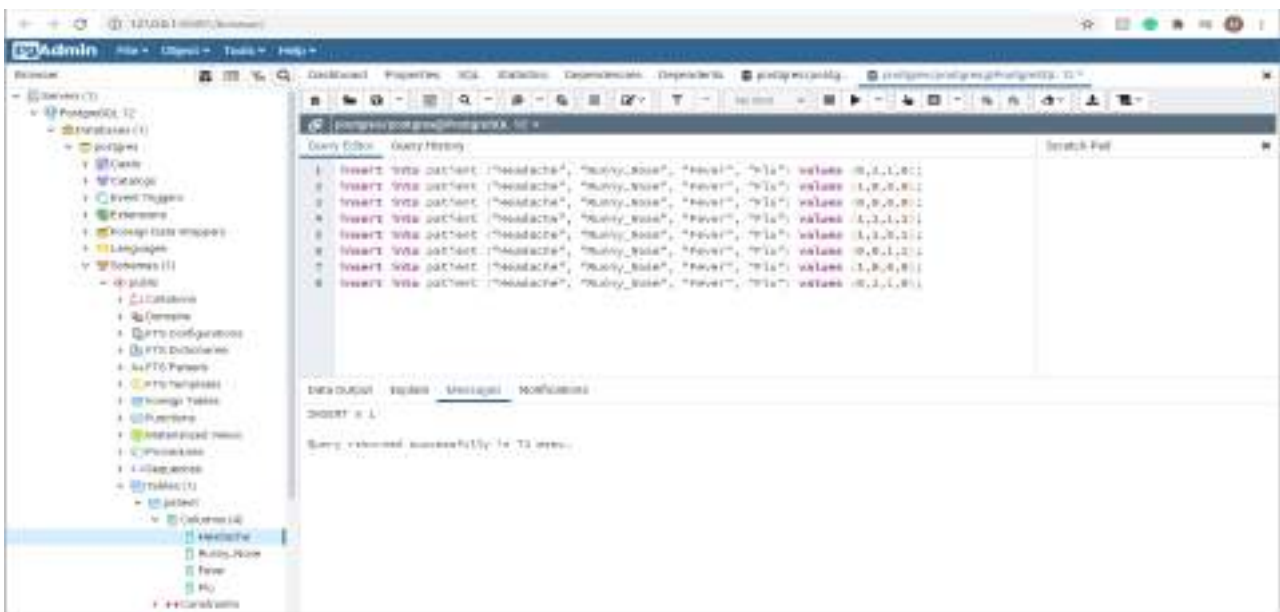


Below are the screenshots of PostgreSQL:

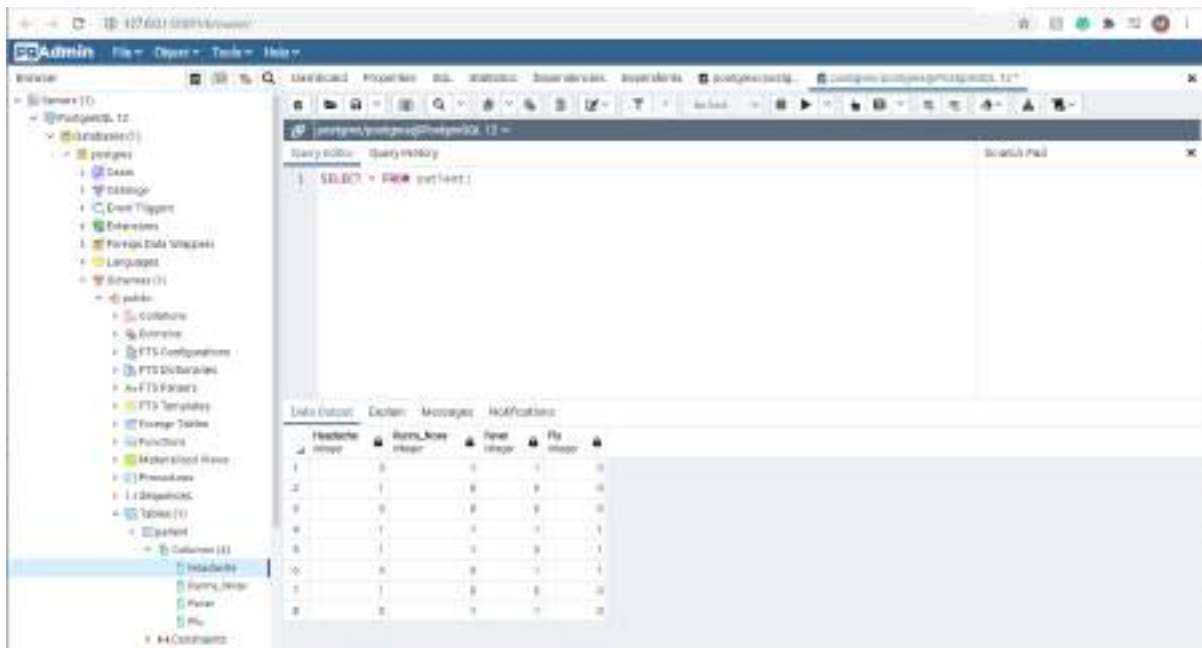
- Installation



- Creating patient table and store the data that will be used for data mining using Python



Displaying the data in patient table using pgAdmin (GUI)



Displaying the data in patient table using SQL Shell (psql)



- Using all the above tools for data mining

Data from a **PostgreSQL** table can be read and loaded into a pandas DataFrame by calling the method **DataFrame.read\_sql()** and passing the database connection obtained from





the **SQLAlchemy Engine** as a parameter. [14]

Below is the screenshot of Jupyter Notebook showing all the Python codes for the above purpose:

## Library import and data loading

```
In [1]: # Import the required libraries
import pandas as pd
import sqlalchemy

# Connect to PostgreSQL database
engine = sqlalchemy.create_engine('postgresql://postgres:family889@localhost/postgres')
con = engine.connect()

# Show the name of table
print(engine.table_names())

# Get a Pandas DataFrame (named "dfTable") from patient table in PostgreSQL database
table_name = 'patient'
dfTable = pd.read_sql(table_name, con = engine, columns = ['Headache', 'Runny_Nose', 'Fever', 'Flu'])
print(dfTable) # print all the dataset in patient table

# Close the connection
con.close()
```

	Headache	Runny_Nose	Fever	Flu
0	0	1	1	0
1	1	0	0	0
2	0	0	0	0
3	1	1	1	1
4	1	1	0	1
5	0	0	1	1
6	1	0	0	0
7	0	1	1	0

```
In [2]: # Print the summary about the dataset
print("Patient dataset has {} data points {} variables each." .format(dfTable.shape))

Patient dataset has 8 data points 4 variables each.
```

```
In [3]: # Divide the dataframe into features (X) and response (y)
X = dfTable.drop(['Flu'], axis=1)
y = dfTable['Flu']
X.shape
```

```
Out[3]: (8, 3)
```

## Classifier Modelling

```
In [4]: # Fit the model
from sklearn.naive_bayes import GaussianNB
nb = GaussianNB()
nb.fit(X, y)
```

```
Out[4]: GaussianNB()
```

## Prediction

```
In [5]: # Create a dataframe for the new data to be predicted with 3 data points (3 patients), named "df1"
new_data = {'Headache' : [1, 1, 0],
            'Runny_Nose' : [0, 1, 1],
            'Fever' : [1, 1, 0]}
df1 = pd.DataFrame(new_data)

# Print the new dataset
df1
```

```
Out[5]:
```

	Headache	Runny_Nose	Fever
0	1	0	1
1	1	1	1
2	0	1	0



### Predicting the Likelihood that a patient is getting Flu or not

```
In [16]: # new data for each patient to be predicted
patient1 = df1.loc[0].values.reshape(1,3)
patient2 = df1.loc[1].values.reshape(1,3)
patient3 = df1.loc[2].values.reshape(1,3)
```

```
In [17]: #predict class membership for each patient
y_pred_patient1 = nb.predict(patient1)
y_pred_patient2 = nb.predict(patient2)
y_pred_patient3 = nb.predict(patient3)
```

```
In [18]: #Predicted Probability
pred_prob_patient1 = nb.predict_proba(patient1)
pred_prob_patient2 = nb.predict_proba(patient2)
pred_prob_patient3 = nb.predict_proba(patient3)
```

**Define functions to display prediction results**

```
In [19]: #define function to display class label
def display_classlabel(x, y_pred):
    label = ''
    if y_pred == 0:
        label = "this patient is NOT getting Flu"
    else:
        label = "this patient is getting Flu"
    print('Predicted class membership for', x, 'is', y_pred, ', which means', label)
```

```
In [19]: #display prediction class label
display_classlabel('patient 1', y_pred_patient1)
display_classlabel('patient 2', y_pred_patient2)
display_classlabel('patient 3', y_pred_patient3)
```

Predicted class membership for patient 1 is 0 , which means "this patient is NOT getting Flu"  
 Predicted class membership for patient 2 is 1 , which means "this patient is getting Flu"  
 Predicted class membership for patient 3 is 0 , which means "this patient is NOT getting Flu"

```
In [11]: #define function to display predicted probability
def display_ProbProb(x, y_pred, pred_prob):
    prob_label = ''
    prob = 0
    if y_pred == 0:
        prob_label = ', which means the probability of NOT getting Flu is'
        prob = pred_prob[:,0]
    else:
        prob_label = ', which means the probability of getting Flu is'
        prob = pred_prob[:,1]
    print('Predicted probability for is is 0.44 Xs 0.56' if x, prob, prob_label, 100*prob))
```

```
In [11]: #display predicted probability
display_ProbProb('patient 1', y_pred_patient1, pred_prob_patient1)
display_ProbProb('patient 2', y_pred_patient2, pred_prob_patient1)
display_ProbProb('patient 3', y_pred_patient3, pred_prob_patient1)
```

Predicted probability for patient 1 is 0.555 , which means the probability of NOT getting Flu is 55.5%  
 Predicted probability for patient 2 is 0.751 , which means the probability of getting Flu is 75.1%  
 Predicted probability for patient 3 is 0.7756 , which means the probability of NOT getting Flu is 77.56%

```
In [11]: # display the result in table
result = {'Prediction_Flu' : [y_pred_patient1, y_pred_patient2, y_pred_patient3]}
df1 = pd.DataFrame(result)
```

```
output = pd.reset_index(df1, axis=1)
output
```

```
Out[11]:
```

	PREDICTION	PREDICTION_Flu	PREDICTION_Prob	PREDICTION_Prob_Label
0	0	0	0.555	55.5%
1	1	1	0.751	75.1%
2	0	0	0.7756	77.56%



## Summary:

- Many data mining techniques and tools can be used to generate new information or predict outcomes that help businesses solve problems, mitigate risks, or grasp new opportunities.
- It is essential to know the type of business problem in order to determine which type of data mining techniques to use for the best results.
- There are many classification algorithms, we don't have to try all of them for any given classification problem, it depends on the type of application and data set.

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# 让中医药瑰宝惠及世界

## (Memanfaatkan Harta Pengobatan Tradisional China Bagi Dunia)

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### ABSTRACT

Historically, Chinese medicine has made an important contribution in fighting the pandemic. Currently, Chinese medicine has made a tremendous contribution to the prevention and control of the coronavirus pandemic. For example, through the combined application of Western medical science and traditional Chinese medicine can shorten the healing process, reduce the transition from mild to critical illness, for mild and ordinary patients can effectively prevent the transition to serious and critical illness, improve the quality of rescue and reduce the number of patients. Dead; can significantly inhibit the production of toxins in the patient's body, as well as avoid the occurrence of inflammatory factors; and others. Apart from medicine, Chinese medicine also has many non-medicinal therapies, such as acupuncture, *Baduanjin*, acupuncture point applications, moxibustion spacers, heat-sensitive moxibustion, cupping and other methods that can help patients improve their symptoms. At present, the spread of the pandemic situation abroad is still continuing, anti-import pressure abroad continues to increase and the risk is always there. To consolidate the results of pandemic prevention and control, it is necessary to carry out a good clinical summary of the treatment of corona virus infection, conduct research on mechanisms of effective clinical treatment solutions and prescriptions, accelerate research on drug feasibility and clinical indications.

*Keywords: Chinese Medicine ,Therapies, Pandemic*



安徽省中医药大学第三附属医院民间医药特色诊疗中心 病毒没有国界，疫情不分种族中医药  
是中华文明的瑰宝，有实 力为全球战疫贡献中国智慧、中国方案

以此次抗击疫情为契机，与其他国家携手打造“健康丝绸之路”、 加强传统医药领域的  
合作，中医药将发挥更大作用，助推民心相通

最近，在美国纽约一家中药房，店员正忙着用中药秤为顾客称金 银花、桂枝等草药。新冠  
肺炎疫情在全球多点暴发以来，国际社会日 益关注中医药抗疫功效，中医药在海外市场升  
温。

抗击新发传染病是没有硝烟的战争。非典、甲流、埃博拉出血 热……人类面对新发  
传染病，每一次都可谓遭遇战，而疫苗和特异性 抗病毒药的研发却需要一定的时间周期。  
应对新冠肺炎疫情，我们同 样面临相似难题。令人眼前一亮的是，中医药筛选出临床证实  
有效的“三药三方”：金花清感颗粒、连花清瘟胶囊、血必净注射液和清肺排 毒汤、化湿败  
毒方、宣肺败毒方。据统计，我国新冠肺炎确诊病例中，7 万余人使用了中医药，占  
91.5%。临床疗效观察显示，中医药总有效率达 90%以。

面对新发传染病，中医药为何能有“药”和“方”？原因在于，中医运 用的是整体性、调和性思  
维。以清肺排毒汤为例，中医立足“排毒”而的方法，改变病毒生存的环境，抑制病毒在体内  
生长，提高人体的免疫力，从而达到“正气存内，邪不可干”的目的。疫情来袭，中医往往 能  
发挥“扶正祛邪”的作用。这次抗击新冠肺炎疫情，中医药功不可没。在新冠肺炎治疗中，中  
医药介入早、参与度高的地方，患者的死亡率 相对较低。实践证明，中医药是打赢疫情防  
控阻击战的利器。



病毒没有国界，疫情不分种族。在应对这场全球公共卫生危机的过程中，构建人类命运共同体的迫切性和重要性更加凸显。让中医药瑰宝惠及世界，是我国作为负责任大国的担当，更是中华民族文化自信的体现。中国及时主动同世卫组织合作，分享中医药参与疫情防控经验，并把最新版本新冠肺炎中医药诊疗方案翻译成英文，在国家中医药管理局官网全文公开。有关组织和机构已经向意大利、法国等十多个国家和地区捐赠了中成药、饮片、针灸针等药品和器械。中医药是中华文明的瑰宝，有实力为全球战疫贡献中国智慧、中国方案。

历史上，中医药为抗击疫病作出过重要贡献。今天，中医药又为新冠肺炎疫情防控作出突出贡献。如，中西医结合治疗，能减缓、阻止重症向危重症、普通型向重症转化，提高治愈率、降低病亡率；能有效抑制患者体内毒素的产生，避免或者延缓炎症风暴的发生；等等。除了药物，中医还有不少非药物疗法，针刺、艾灸、八段锦、穴位贴敷、隔物灸、热敏灸、拔罐等方法能够帮助患者改善症状。当前，境外疫情扩散蔓延态势仍在持续，我国外防输入压力持续加大，国内疫情反弹的风险始终存在。巩固疫情防控成果，要做好中医药治疗新

冠肺炎临床总结，对临床救治有效的方案、方剂开展机理研究，并加快成药性研究和临床适应症研究。从长远看，要探索中医药更好融入国家传染病防控体系，让中医药这个中华文明瑰宝发挥更大作用。

在世界范围内，中医药正在得到越来越多的认可。去年5月，第七十二届世界卫生大会审议通过《国际疾病分类第十一次修订本》，首次将起源于中医药的传统医学纳入其中。但值得注意的是，长期以来，由于文化差异等原因，中医药容易被误读。疫情期间，为避免因



滥用出现不良反应，患者最好在中医医师的指导下合理用药。尽管中医药已经传播到 200 多个国家和地区，但中药在一些发达国家还未能以药品身份面世。以此次抗击疫情为契机，与其他国家携手打造“健康丝绸之路”、加强传统医药领域的合作，中医药将发挥更大作用，助推民心相通。

中医学包含着中华民族几千年的健康养生理念及其实践经验，凝聚着中国人民和中华民族的博大智慧。应对全球卫生挑战、推进国际卫生合作、推动完善全球公共卫生治理，中医药潜力无限，必将日益发挥独特而重要的作用。

加快构建中西医结合的应急医疗体系。不断提高中医药防病治病能力和科技创新能力，在中医药领域建立开放、竞争、协作的机制，特别是通过资源共享、联合攻关、优势互补、技术支持、联合共建等完善中医临床和研究机构的协作机制，提高中医药应对突发公共卫生非“杀毒”，因而老药依然能派上新用场。中医通过清热、化湿、解毒家各级疾病防治决策和方案制定中，更好发挥中医专家的作用。

#### **TRANSLATE:**

Virus Corona tidak mengenal batas dan pandemi tidak memiliki perbedaan ras. Pengobatan Tradisional China adalah harta peradaban China yang memiliki kekuatan dengan Kearifan China dan Solusi China untuk berkontribusi dalam perang global melawan pandemi. Perjuangan melawan pandemi ini adalah sebuah peluang untuk bergandengan tangan dengan negara lain membangun "jalur sutra yang sehat" dan memperkuat kerja sama di bidang pengobatan tradisional. Pengobatan tradisional China akan memainkan peranan lebih besar dalam membentuk komunitas senasib sepenanggungan manusia.

Baru-baru ini, sebuah toko obat China di New York, penjaga tokonya sibuk menimbang honeysuckle, cabang cassia, dan jamu lainnya untuk pelanggannya. Sejak merebaknya penyakit corona di banyak bagian dunia, masyarakat internasional semakin memperhatikan khasiat pengobatan China sehingga pasar pengobatan China di luar negeri meningkat tinggi.





Perang melawan penyakit menular Covid19 adalah perang tanpa bubuk mesiu. SARS, Virus Influenza A, demam berdarah Ebola ... Setiap manusia menghadapi penyakit menular baru, seperti halnya menghadapi sebuah perjuangan yang tak terduga, tetapi perjuangan dalam pengembangan vaksin dan obat antivirus membutuhkan jangka waktu tertentu. Kami juga menghadapi masalah dalam menangani pandemi corona. Yang menjadi titik terang pencegahan dan pengendalian pandemi ini adalah bahwa Pengobatan Tradisional China telah memilih “tiga obat dan tiga ramuan” yang terbukti secara klinis: Granul Jinhua Qinggan, Kapsul Lianhua Qingwen, Injeksi Xuebijing, Ramuan Qingfei Paidu (Ramuan untuk Pembersihan Paru-paru dan Detoksifikasi), Ramuan HuaShi Baidu dan Ramuan XuanFei Baidu. Menurut statistik, di antara kasus penyakit virus corona yang terkonfirmasi di negara China ada lebih dari 70.000 orang, sebanyak 91,5% kasus mendapatkan perawatan dengan pengobatan tradisional China. Menurut observasi klinis, efektivitas penerapan ilmu pengobatan tradisional China mencapai 90 persen ke atas.

Menghadapi penyakit menular baru, mengapa pengobatan China memiliki "obat" dan "ramuan"? Alasannya adalah pengobatan China menggunakan konsep holistik. Sebagai contoh, Ramuan Qingfei Paidu adalah pengobatan tradisional China didasarkan pada "detoksifikasi" , sehingga obat lama masih dapat digunakan untuk tujuan baru. Pengobatan tradisional China menggunakan metode menghilangkan kelembapan dan panas, detoksifikasi, menghambat pertumbuhan virus di dalam tubuh dan meningkatkan kekebalan tubuh sehingga mencapai tujuan" mengusir energi negatif dan menyimpan energi positif dalam tubuh". Ketika pandemi menyerang, pengobatan China seringkali dapat berperan dalam "memperkuat tubuh dan melenyapkan kejahatan." Perang melawan pandemi virus corona ini tidak lepas dari pengobatan tradisional China. Pengobatan tradisional China dilibatkan lebih dini dan memiliki tingkat partisipasi yang tinggi dalam pengobatan pneumonia akibat virus corona sehingga angka kematian pasien relatif rendah. Praktik membuktikan, pengobatan tradisional China adalah senjata untuk memenangkan perang melawan pandemi.

Virus tidak mengenal batas dan pandemi tidak memiliki perbedaan ras. Pentingnya membangun komunitas bersama bagi umat manusia dalam menghadapi krisis kesehatan masyarakat global ini menjadi lebih menonjol. Memanfaatkan harta pengobatan tradisional China bagi dunia merupakan manifestasi kepercayaan budaya bangsa China dan juga adalah kewajiban negara kami sebagai negara yang bertanggung jawab. China segera dan secara aktif bekerja sama dengan Organisasi Kesehatan Dunia untuk berbagi pengalaman pengobatan China



dalam pencegahan dan pengendalian pandemi, serta menerjemahkan versi terbaru dari solusi pengobatan China untuk penyakit virus corona ke dalam bahasa Inggris dan dipublikasikan di situs resmi Administrasi Negara Pengobatan Tradisional China. Organisasi dan institusi terkait telah menyumbangkan obat-obatan paten China, jarum akupunktur dan obat-obatan serta peralatan lainnya ke lebih dari sepuluh negara dan wilayah termasuk Italia dan Prancis. Pengobatan Tradisional China adalah harta peradaban China yang memiliki kekuatan dengan Kearifan China dan Solusi China untuk berkontribusi dalam perang global melawan pandemi.

Secara historis, pengobatan China telah memberikan kontribusi penting dalam memerangi pandemi. Saat ini, pengobatan China telah memberikan kontribusi yang luar biasa untuk pencegahan dan pengendalian pandemi virus corona. Misalnya, melalui penerapan gabungan ilmu kedokteran Barat dan ilmu kedokteran tradisional China dapat memperpendek proses penyembuhan, mengurangi peralihan dari penyakit ringan ke penyakit kritis, terhadap pasien yang ringan dan biasa dapat dengan efektif mencegah peralihan ke penyakit gawat dan kritis, meningkatkan mutu penyelamatan dan mengurangi jumlah kematian; secara signifikan dapat menghambat produksi racun di tubuh pasien, serta menghindari terjadinya faktor-faktor inflamasi; dan lain-lain. Selain obat-obatan, pengobatan China juga memiliki banyak terapi non-obat, seperti akupunktur, moksibusi, Baduanjin, aplikasi titik akupunktur, moksibusi spacer, moksibusi peka panas, bekam dan metode lain yang dapat membantu pasien memperbaiki gejalanya. Saat ini, penyebaran situasi pandemi di luar negeri masih terus berlanjut, tekanan anti-impor luar negeri terus meningkat dan risikonya selalu ada. Untuk mengkonsolidasikan hasil pencegahan dan pengendalian pandemi, perlu dilakukan ringkasan klinis pengobatan infeksi virus corona dengan baik, melakukan penelitian mekanisme tentang solusi dan resep pengobatan klinis yang efektif, mempercepat penelitian tentang kelayakan obat dan indikasi klinis. Dari perspektif jangka panjang, perlu untuk mengeksplorasi integrasi yang lebih baik dari pengobatan China ke dalam sistem pencegahan dan pengendalian penyakit menular, sehingga pengobatan China sebagai harta peradaban dapat memainkan peran lebih besar.

Pengobatan China semakin dikenal di seluruh dunia. Pada bulan Mei tahun lalu, Majelis Kesehatan Dunia Ketujuh Puluh Dua meninjau dan menyetujui “Revisi Kesebelas dari Klasifikasi Internasional Penyakit”, memasukkan obat tradisional yang berasal dari pengobatan China untuk pertama kalinya. Tetapi perlu diperhatikan bahwa sepanjang ini, karena perbedaan budaya dan alasan lain, pengobatan China mudah disalahpahami. Selama pandemi, untuk menghindari efek samping akibat penyalahgunaan obat sebaiknya pasien menggunakan



obat-obatan secara rasional di bawah petunjuk pakar pengobatan China. Meskipun pengobatan tradisional China telah menyebar ke lebih dari 200 negara dan wilayah, akan tetapi pengobatan China belum dikategorikan sebagai obat di beberapa negara maju. Perjuangan melawan pandemi ini adalah sebuah peluang untuk bergandengan tangan dengan negara lain membangun "jalur sutra yang sehat" dan memperkuat kerja sama di bidang pengobatan tradisional, pengobatan tradisional China akan memainkan peranan lebih besar dalam membentuk komunitas senasib sepenanggungan manusia.

Pengobatan Tradisional China mengandung konsep pelestarian kesehatan dan pengalaman praktik bangsa China selama ribuan tahun, merupakan perwujudan kearifan dari bangsa China. Menanggapi tantangan kesehatan global, memajukan kerjasama kesehatan internasional dan mempromosikan peningkatan tata kelola kesehatan masyarakat global, pengobatan tradisional China memiliki potensi tak terbatas yang berperan penting dan unik untuk kedepannya.

Mempercepat pembangunan sistem medis darurat yang mengintegrasikan pengobatan China dan Barat. Terus meningkatkan kemampuan pengobatan China untuk mencegah dan mengobati penyakit serta inovasi teknologi, membangun mekanisme yang terbuka, kompetitif dan kolaboratif di bidang pengobatan China, terutama melalui berbagi sumber daya, penelitian bersama, keunggulan pelengkap, dukungan teknis, serta bersama membangun dan meningkatkan mekanisme kerjasama lembaga penelitian untuk meningkatkan kemampuan pengobatan China secara keseluruhan dalam menanggapi keadaan darurat kesehatan masyarakat. Pada waktu yang sama, mempercepat pembangunan sistem medis darurat yang mengintegrasikan pengobatan China dan Barat dalam mengambil keputusan dan perumusan rencana pencegahan dan pengendalian penyakit di negara, sebaiknya menggunakan peran ahli pengobatan China.



# Self Treatment Therapy According Chinese Medicine And Cupping Therapy And Its Relationship With Public Health

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## ABSTRACT

Right now, we are in deep predicament on covid-19 pandemic, which led to a dramatic loss of life all over the world and a great challenge to public health. This pandemic has been affecting the entire health care system especially public health since it is difficult to set an appointment with your local hospitals, clinics or health centers for a checkup due to fear of contacting with an infected person. In this trying times, let me give few information regarding ways to keep you from going outside for simple health remedies. All of this can be done in the comfort of your own home. these information are based from a well-documented chinese medicine therapy and patient-related experience with positive feedbacks. I have 3 cases to be used in each topic.

*Keywords: Chinese Medicine, Cupping, Public Health*

### Clinical Research Or Clinical Study

1. Case report from mr.kareem thaweer from algeria has chief complaints of severe asthma attacks, allergic sinusitis. he was using medications for years but to no avail. he contacted me and advised him about the honey plus ginger on the umbilicus once a day for 1 months. After 20 days of continuous treatment from the mixture, the body's response was very good. increased in immune response, better energy, less fatigue, asthma attacks were not experienced and allergic sinusitis has greatly improved. with that, i further given him continuous instructions to continue the procedure and to follow with me for future consults and reports.



2. This case report from Mr. Yousef from Egypt, reported that her 13-year-old daughter was suffering from early stages of depigmentation of the skin on her hands and feet since 3 months. She was consulting a dermatologist and was diagnosed with vitiligo. She has undergone prescribed medical treatment for 3 months but had no signs of any improvement. She immediately contacted me and I advised her to do the honey plus ginger on the umbilicus once daily continuously and after 20 days of continuous use, the white patches totally disappeared.

A 53-year-old male, uncle of Mr. Yousef, suffering from osteoporosis, and knee pain for 15 years. Ambulation is difficult for him especially from climbing stairs but can't control because it is how he earns a living. Mr. Yousef suggested to try this mixture and just within 1 month of using, he reported a significant decrease with the pain, sudden boost of energy and less fatigue. He said that "he feels like he was 20 years old again".

3. This case Hijazia, she has suffering from scapular region muscular pain. Somebody suggested to make a cupping therapy with Dr. Maher. I did for him a precise cupping therapy technique which targets the specific points in the body to instantly treat the problem in the body. In his case, it is the muscular pain on his shoulders. He reports that right after the therapy, he instantly felt the relief.

The ear stimulation – by applying pressure on the auricular acupuncture points which are all over the outer ear, the organ gets stimulated and will get instant relief from drowsiness, allergy, dizziness, depression, vertigo, vitiligo, etc. This works by stimulating the qi channels/meridians, thereby eliminating the weakness by stimulating the energy flow from these channels and opening the blockages of pathways for the energy and blood circulation to flow continuously to the innervated organs of the certain points in the ear. The case that I've seen a significant improvement with this ear stimulation and I also talked about it in one lecture I made on my YouTube channel which gathered at most 2 million views and lots of comments. One case I had with an issue with vitiligo, a disease of the skin which makes some white patches all over the body has reported a significant improvement on his skin. Some cases we had, like vertigo or dizziness was relieved by this method in a matter of minutes. We also advise the patient to do this continuously for at least once or twice a day for 2 to 5 mins for a month or longer depending on the severity of the problem. After hijama, some people, especially first timers, report an episode of severe dizziness then will lead to fainting. The first aid we do is let the patient lie on his back and stimulate or apply pressure on both ears. You will notice a significant loss of blood flow on the ears that is why dizziness or fainting spells happen. With the ear stimulation method, it helps the blood to slowly perfuse in the



head therefore increasing the flow to the head, releasing blockage and slowly gaining consciousness and instant relief of dizziness. There is also one case where i advised to stimulate the inner lobe because of difficulty of losing weight. This works by stimulating a portion of the ear where it decreases the food appetite. Another case which greatly helped him make his blood pressure lower by applying strong pressure on the inner lobe which makes the blood pressure goes down because it innervates the heart.

Applying pressure on the ulnar part of the wrist, this point passes on 2 very important meridian of the body, the small intestine and heart. this works by slightly pinching this point and will help mostly with problems of scapular, shoulder pain, and neck pain and it gained a lot of positive comments with people who tried this method. I have encountered a patient whose problem is related to a herniated disk on the cervical region and experienced a lot of shoulder pain, and radiating numbness on the left arm to her fingers, i advised to make this method everyday for at least a month and there was significant decrease on the numbness and pain. Moreover, one commenter also noted that he tried this and works a lot with his muscle spasms on the upper back.

Applying pressure on the radial part of the wrist which innervates the lung and large intestine meridian. This point on the wrist helps to relieve related symptoms of sorethroat coughing, shortness of breath, smoking and colon problems such as constipation, bloating, flatulence, and other git related problems. additionally, we have a point in the middle of the thumb and index finger which is also know as "hegu" or the "point of life" in chinese medicine which is also beneficial for git pains, headache, uterine cramps, and almost all types of pain of the body. Same as we said before, we have to apply pressure on pinch on this point so it will stimulate the continuous flow of qi to help the body to repair itself.

Lastly, the honey on the umbilicus – 7 or 8 years ago, i introduced a very special and powerful technique which is very easy to carry out. As we all know, the central part of our body is the umbilicus that passes to almost all meridians of the body. We can say that we can treat a lot of conditions by applying different types of herbs on the navel region. There are almost 20 types of herbs useful for this. But to make it easier for people, i advised them to bring any kind of honey but it is best to use the pure one. after that, mix a tablespoonful of ginger powder to 200 grams of honey. this is the concoction we use to put inside the umbilicus. Take a small tissue paper or cotton and dip a little of the mixture and put in inside the umbilicus every day for a specific period of time, depending on the severity of the case. This mixture is very good in relieving abdominal pain, uterine colic pain, renal colic pain. I did a lecture regarding this and it gained lots of good feedbacks



from the audiences on my channel. A case of severe menstrual cramps has significantly improved with the help of this method. Before she was going to medical centers to receive injections for the pain relief brought about by menstruation, but when she tried this, she reported to achieve a relief within minutes of application. For chronic diseases like chest pains, bronchial asthma, inflammatory bowel disease, ulcerative colitis, gastritis, we need to advise the patient to continue the application for longer periods of time from about 2 weeks until 1 year. There was a case from before, she was in a rural place so, medical attention is a little difficult, she has a weak eye sight from which she can't recognize anything in front of her. She uses her other senses to identify or locate certain people or things she needs. I advised her to use this mixture and after a year, she was able to recognize her family members. I asked her to continue doing the treatment for another 2 years.

Another grateful patient is from another country, has throat lesions which makes his voice become very hoarse to the point he can't produce sound anymore. He used this procedure and with days, his voice is slowly starting to come back. a severe case of vitiligo also has helped by this treatment. A lot of dermatologists have failed in treating this patient but with our help, improvement started to come. This case is detailed on my youtube channel for further information. Hypertension, diabetes mellitus and migraine are some of the chronic diseases that it helps. So many cases have been reported to experience an improvement with this mixture, some of these are improvement in the urination of people who has prostate enlargement, decrease in the burning sensation of hyperacidity, improvement with the monthly cycle of females, even patients with psoriasis had improve dramatically, some of them doesn't have any lesions anymore, some patients had a great healing process with the open lesions. this happened to one of my cases in bahrain where in a middle-aged female had a sudden onset of psoriatic lesions all over her body. some lesions are oozing with pus and blood due to trauma of the skin. but after using the mixture for atleast 2 months, lesions started to heal. I advised her to continue until all lesions disappear.

A patient suffering from diabetes mellitus type 2, has very poor control of his glucose levels, but when he was using the mixture, he gained control of his glucose levels. Before, concluding this conference, let me impart a very important technique of cupping through the acupuncture points. This technique gives a strong effect and good result compared to a traditional cupping therapy. I introduced it in our center in bahrain. and the first to incorporate chinese medicine(acupuncture points) in hijama therapy. Before doing the hijama, we need to determine the exact points of the patients by locating the parts of the body structure. For example, on the





scapular region, there are points that needed to be pressed in order to determine the exact location or exact ailment that our patient has. we use this tenderness as indication for the exact location from which you will make the incision. incisions need to be deeper for it to be more effective. But there are some considerations before doing a deep incision such as glucose levels, medications taken ( aspirin, clopidogrel) and the severity of the disease. we have lots of cases who has improved a lot with this hijama and advice patients to always keep in contact with medical doctors for the assistance of the case.



# Principles and Tools for Evaluating Learning in the Covid-19 Pandemic Era

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## ABSTRACT

The current covid 19 pandemic is bringing changes Great in all existing arrangements both from an economic aspect, Socio-culture, politics, health, and also education. Currently on Indonesia, students, must carry out learning from home. This causes students, parents, teachers, lecturers to adapt quickly so they can minimize backwardness in subject matter and competencies supposed to be obtained by students or students at school or Higher Education. Because learning is carried out online, Then the evaluation that is carried out must also be precise to get it measure the success of students in learning. Principle and the evaluation tools used must also be in accordance with the process learning carried out, in order to provide an evaluation true and goals can be achieved properly. In this paper will describes the principles and tools of online learning evaluation during covid 19.

*Keywords: Principles and Tools, Evaluating Learning, Covid-19 Pandemic Era*

### A.Introduction.

Learning assessment can be a determinant of the quality of education, so efforts to plan and carry out an assessment should pay attention to several assessment principles and procedures. These principles include:

- (a) In assessing learning outcomes, it should be designed in such a way that it is clear the ability to be assessed, the assessment materials, assessment tools, and the interpretation of the results of the assessment. As a benchmark or signposts in designing the assessment of learning outcomes is the applicable curriculum and the textbooks it uses. In the curriculum, curricular goals and instructional goals should be studied, the subjects given, the scope and order of presentation, and guidelines for how to implement them.



- (b) Assessment of learning outcomes should be an integral part of the teaching and learning process. This means that the assessment is always carried out at all times of the teaching and learning process so that its implementation is continuous. There is no teaching and learning process without assessment, it should be used as a watchword for every teacher. This principle implies the importance of formative assessment so that it can benefit both students and teachers.
- (c) In order to obtain objective learning outcomes in the sense of describing student achievement and abilities as they are, the assessment must use various assessment tools and be comprehensive in nature. With the comprehensive nature, it means that the aspects or abilities that are judged are not only cognitive aspects, but also affective and psychomotor aspects. Likewise, in assessing the cognitive aspects, all aspects should be covered, namely knowledge, understanding, application, analysis, synthesis and evaluation in a balanced manner.
- (d) Assessment of learning outcomes should be followed by a follow-up. The assessment result data is very useful for both teachers and students. Therefore, it should be noted regularly in special notes regarding student progress. Likewise, the assessment results data must be able to be interpreted so that teachers can understand their students, especially their achievements and abilities. Even if it is possible, the teacher can predict future student achievement. The results of the assessment should also be used as material for perfecting the teaching program, correcting teaching weaknesses, and providing learning guidance to students who need it. Furthermore, it can be used as material to improve the assessment tool itself.

There are several steps that can be used as guidance in carrying out the learning outcome assessment process, namely:

- (e) Formulate or reinforce the goals of teaching objectives. Given the function of assessing learning outcomes is to measure the achievement of teaching objectives, it is necessary to make efforts to reinforce the objectives of teaching so that they can provide direction for the preparation of assessment tools.
- (f) Reviewing teaching materials based on curriculum and subject syllabus. It is important to remember the content of the test or assessment questions regarding the teaching material provided. Mastery of teaching materials in accordance with the objectives of teaching objectives is the content and objectives of assessing learning outcomes.
- (g) Develop assessment tools, both test and non-test, suitable for use in assessing the types of behavior described in the teaching objectives. In preparing the assessment tool, the rules for writing questions should be considered.



- (h) Using the results of the assessment in accordance with the objectives of the assessment, namely for the purpose of describing the ability of students, the interests of teaching improvement, the interests of tutoring, as well as the interests of educational accountability reports.

In relation to the preparation of an assessment tool, there are several steps that must be taken, namely:

- (a) Examining the curriculum and textbooks in order to determine the scope of questions, especially subject matter, both in breadth and depth.
- (b) Formulating specific instructional objectives so that it is clear what qualities to judge. Specific instructional objectives must be formulated operationally, meaning that they can be measured by commonly used assessment tools.
- (c) Creating a grid or blueprint for scoring tools. In the grid, the measured ability and proportions must be shown, the scope of the material being tested and its proportions, the difficulty level of the questions and their proportions, the type of assessment tool used, the number of questions or questions, and the estimated time required to work on these questions.
- (d) Arrange or write questions based on the grid that has been made. In writing questions, pay attention to the rules that apply.
- (e) Creating and determining answer keys to questions.

## **B. Learning Outcomes as Objects of Assessment**

The main question before making an assessment is what should be assessed. Against this question we return to the elements contained in the teaching-learning process. There are four main elements of the teaching-learning process, namely objective-material-methods and tools and assessment. The purpose as the direction of the teaching-learning process is essentially the formulation of behavior which is expected to be mastered by students after receiving or taking their learning experiences. Material is a set of scientific knowledge that is elaborated from the curriculum to be conveyed or discussed in the teaching-learning process in order to arrive at predetermined goals. Methods and tools are methods or techniques used to achieve goals. Meanwhile, an assessment is an effort or action to determine the extent to which the predetermined objectives have been achieved or not. In other words, the assessment serves as a tool to determine the success of the process and student learning outcomes.



Processes are activities carried out by students in achieving teaching goals, while learning outcomes are the abilities that students have after receiving their learning experiences. Horward Kingsley divides three kinds of learning outcomes, namely (a) skills and habits, (b) knowledge and understanding, (c) attitudes and ideals. Each type of learning outcome can be filled with materials that have been determined in the curriculum. Meanwhile, Gagne divides five categories of learning outcomes, namely (a) verbal information, (b) intellectual skills, (c) cognitive strategies, (d) attitudes, and (e) motor skills. In the national education system, the formulation of educational goals, both curricular and instructional, uses the classification of learning outcomes from Benyamin Bloom which broadly divides them into three domains, namely the cognitive, affective, and psychomotor domains.

The cognitive domain is concerned with intellectual learning outcomes which consists of six aspects, namely knowledge or memory, understanding, application, analysis, synthesis, and evaluation. The first two aspects are called low-level cognitive and the next four aspects include high-level cognitive. The affective domain with regard to attitudes which consists of five aspects, namely acceptance, answers or reactions, assessment, organization, and internalization. The psychomotor domain deals with the learning outcomes of acting skills and abilities. There are six aspects of the psychomotor domain, namely (a) reflex movements, (b) basic movement skills, (c) perceptual abilities, (d) harmony or accuracy, (e) complex skill movements, and (f) expressive and interpretive movements.

### **C. Tests as a Tool for Assessment of Learning Outcomes.**

Learning outcome assessment tools, namely tests, both essay tests and objective tests. Tests as an assessment tool are questions that are given to students to get answers from students in oral form (oral test), in written form (written test), or in the form of action (action test). Tests are generally used to assess and measure student learning outcomes, especially cognitive learning outcomes with regard to mastery of teaching materials in accordance with educational and teaching objectives. However, to some extent the test can also be used to measure or assess learning outcomes in affective and psychomotoric fields.

There are two types of tests, namely essay tests or essay tests and objective tests. The essay test consists of a free limited description and a structured description. Meanwhile, the objective test consists of several forms, namely true-false choice, multiple choice with various variations, matchmaking, and short or complementary entries. Each type of test is described for its concepts,



types or forms, how it is arranged, its strengths and weaknesses, examination and scoring method, including examples.

**Test Terms** The requirements for a good measuring instrument are as follows:

- (1) must be efficient, parsimony (economical),
- (2) must standardize,
- (3) have norms,
- (4) be objective,
- (5) valid, and
- ( 6) reliable.

The explanation of each of the conditions mentioned above is as follows:

1. **Must be efficient, parsimony.** This condition determines that by using a short period of time, optimal data or results can be recorded .
2. **Must standardize** This standardization requirement is a control for measuring instruments, so that the content of items, standards, and procedures for scoring items are generally applicable to all people who will use the measuring instrument.
3. **Having norms** Measuring instruments must have certain norms in order to measure objects precisely, for example for certain age groups or certain characteristics to be measured so that they can describe the assessment more objectively.
4. **Objective.** The measuring instrument must really describe what should be measured in accordance with the content to be measured, so it is necessary to do qualitative research on the item. Thus measuring instrument items are really a tool that can identify what is being measured.
5. **Valid.** This requirement demands that the measuring instrument must be able to measure what people think should be measured by the measuring instrument.
6. **Reliable.** A good measuring instrument as a measuring tool must be reliable, that is, one that measures the size that must be measured, thus referring to the extent to which the measuring instrument consistently measures whatever it measures.

#### **D. Assessment Techniques in learning during the COVID-19**

Pandemic season 19 Various techniques can be done to collect information about the learning progress of students, both related to the learning process and learning outcomes. This information gathering technique is in principle a way of assessing student learning progress based on competency standards and basic competencies that must be achieved. Basic competency assessment is carried out



based on competency achievement indicators which contain one or more domains. Based on these indicators an appropriate method of assessment can be determined.

During the Covid 19 pandemic where we have to carry out online learning, so even in assessments we must use the appropriate tools. There are several assessment tools that can be used, among others; Performance assessment, attitude assessment, written assessment, portfolio use and self-assessment.

- a. Performance assessment is an assessment carried out by observing the activities of students in doing something. This assessment is suitable for assessing the achievement of competencies that require students to do certain tasks such as; Presentation, discussion, singing, making speeches, reading poetry etc. Performance assessment needs to consider the following points.
  - 1) Performance measures that are expected to be carried out by students to show the performance of a competency.
  - 2) The completeness and accuracy of the aspects to be assessed in the performance.
  - 3) Special abilities required to complete tasks.
  - 4) Try not to have too many abilities to be assessed, so that all can be observed.
  - 5) The abilities to be assessed are sorted based on the order that will be observed.
- b. Attitude Assessment Attitude stems from feelings (like or dislike) which are related to someone's tendency to respond to something / object. Attitude is also an expression of one's values or outlook on life. Attitudes can be formed, resulting in the desired behavior or action. In general, the objects of attitude that need to be assessed in the learning process of various subjects are as follows;
  - 1) Attitude towards subject matter.
  - 2) Attitudes towards teachers / instructors
  - 3) Attitudes towards the learning process
  - 4) Attitudes related to norms related to the material.Attitude assessment techniques can be done in several ways or techniques. These techniques include; behavioral observations, direct questions, and personal reports.
- c. Portfolio Assessment Portfolio assessment is an ongoing assessment based on a collection of information that shows the development of students' abilities in a certain period. This information can be in the form of students' work from the learning process considered the best by students, test results (not grades) or other forms of related information. with certain competencies in one subject.

Portfolio assessment is basically assessing the work of students individually in one period for a subject. At the end of a period the work is collected and assessed by the teacher and the students themselves. Based on this development information, teachers and students themselves can assess the development of students' abilities and continue to make improvements. Thus, portfolios can show the development of students' learning progress through their work, among others; essays, poems, pictures,





book / literature reviews, research reports, synopses, etc. Things that need to be considered and used as guidelines in the use of portfolio assessment in schools, among others;

- 1) The work of students / students is really the work of the students themselves.
- 2) Mutual trust between teachers and students.
- 3) Mutual confidentiality between teachers and students.
- 4) Joint ownership between students and teachers.
- 5) Satisfaction.
- 6) Conformity.
- 7) Assessment of processes and results
- 8) Assessment and learning.

d. Self Assessment (Self Assessment). Self-assessment is an assessment technique in which students are asked to assess themselves in relation to the status, process, and level of achievement of the competencies they have learned in certain subjects. Self-assessment techniques can be used to measure cognitive, affective and psychomotor competencies. Self-assessment is carried out based on clear and objective criteria.

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# The Effect of E-Portfolios and Self-Regulated Learning on Students' English Speaking Skill During Covid-19 Pandemic

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## ABSTRACT

Theoretically, the use of e-portfolios and self-regulated learning are two important things that affect learning outcomes. However, empirical evidence on this matter, especially regarding the skill to speak in English is still very limited. This study aimed at revealing : (1) the effect of using e-portfolios in learning during the Covid-19 pandemic on students' English speaking skill, (2) the effect of self-regulated learning on students' English speaking skills, and (3) The effect of the interaction between the use of e-portfolios and self-regulated learning on students' English speaking skill. This study is an experimental study using a posttest-only control group design. The sample in this study was the second semester students of the English Language Education Study Program of the Ganesha University of Education in the academic year 2019/2020 in Speaking for Social Interaction class. Test was used to collect data on students' speaking skill, then a questionnaire is used to collect data on students' self-regulated learning. Data analysis used 2-way ANOVA (two-way ANOVA). The results showed that the use of e-portfolios in learning and self-regulated learning had an effect on the students' English speaking skill. In addition, it was also found that there was an interaction effect between the use of e-portfolios and self-regulated learning on students' English speaking skill.

*Keywords: speaking skill, e-portfolio, self-regulated learning*

## INTRODUCTION

Speaking skill is recognized as one of the most important skills in language learning, especially English. Speaking is very important to make communication effective. The idea of English as a global language has reinforced the importance of English language skills. In order to meet international demands in English communication skills, English courses have been enriched and



adapted continuously. In Indonesia, English has been introduced into Indonesian education for at least the last decades. English has been made the main foreign language for communication in the fields of tourism, education and international affairs including diplomatic, trade and general communications. English is considered to be a foreign language with a very significant impact and has been taught as a foreign language (EFL) for many years from elementary school to university level in Indonesia. Students in Indonesia usually spend around 9-12 years studying this subject before they reach their tertiary education

However, it seems difficult for Indonesian students to master English language skills. When students enter higher education, the majority are still unable to communicate well using English. Many factors cause this to happen. One of them is that their opportunities to use English in communication are very limited. The media for them to express themselves in English is still limited.

In education, this opportunity must be opened as wide as possible. Therefore, the search for the media and the expansion of their opportunities to express themselves in this regard must continue to be developed. Curiosity arose with the large number of research results that revealed that one of the teaching methods, namely e-portfolio, was very successful in using it in writing classes. Seeing the urgency of this speaking skill, this research was formulated.

E-portfolios are very well used in a variety of other skills in language learning. This is evident from the many studies that have proven it.

Lin and Gan (2014) studied the use of English listening strategies by Taiwanese students and self-regulated learning. This study found that independent learning made students plan and evaluate their own listening lessons, gave them the desire to acquire knowledge, motivated them to succeed, and took action to become skilled (Lin & Gan, 2014). This process helps them to be more active in their learning, discover their strengths and weaknesses and use effective methods to succeed. Therefore, Self-regulated Learning makes them good listeners (Lin & Gan, 2014).

Aregu (2013) studied the relationship between self-regulated learning and self-efficacy in speaking and performance among Ethiopian students. As Aregu (2013) states, Self-regulated Learning makes Ethiopian students more motivated and responsible for their learning. Therefore, Self-regulated Learning improves their speaking skills and performance.

In Zarei and Hatami's (2012) study, they studied the relationship between the components of Self-regulated Learning and L2 vocabulary knowledge and the students' skill to understand reading for English learners in Iran. The components of self-regulated learning that were explored in this study were planning, self-evaluation, effort, and self-efficacy. This study showed that these



components had no effect on vocabulary knowledge, while only self-examination and effort had a direct and positive effect on reading comprehension.

Al Asmari and Ismail (2012) have looked for self-regulated learning strategies as predictors of reading comprehension among English learners. Their research shows that self-regulated learning strategies such as rehearsals, self-talk, and elaboration are indicators of reading comprehension.

Mizumoto (2013) has handled increasing self-efficacy in learning vocabulary through the self-regulated learning approach. According to Mizumoto, Self-regulated Learning increases self-efficacy in learning vocabulary. Hence, it helps the participants improve their skills in vocabulary mastery.

Hamedani (2013) studied the relationship between self-efficacy and self-regulated learning in the mastery of English vocabulary by EFL students in Iran. Hamedani stated that there is a strong relationship between self-efficacy and self-regulated learning, which results in increased vocabulary mastery.

In another study, Jenson (2011) focused on how to promote self-regulated learning and critical reflection through student writing portfolios. Research results have shown that e-portfolios can develop students' self-regulation and critical reflection in writing.

However, not many have conducted research on the use of e-portfolios in learning speaking skills. Therefore this research is very interesting to do. The use of e-portfolios in speaking skills is very appropriate if it is associated with self-regulated learning, especially for learning during the Covid-19 period which demands more independent learning at home. This is because in self-regulated learning, students design goals, how to learn and reflect on learning. Whatever is desired happens in the learning process, it is determined by the student himself. This is in line with what is in the e-portfolio. Therefore, research on the effect of e-portfolios and self-regulated learning was conducted.

According to Paulson and Meyer in Zarifsanaiey, et al. (2018) see portfolios as an experimental laboratory to build meaning, which leads students to self-reflection. In addition, Gray (2008) emphasizes that e-portfolios are “products made by a person, digital collections that show experiences, achievements, and learning.” Gray also states that ideas, evidence, reflections, and feedback are the goals of collecting digital objects. In the end, the e-portfolio gets its own audience, which contains evidence of one's learning skill. From the different e-portfolio definitions above, it shows that the e-portfolio is student-centered. They also store student work digitally and help follow the student learning process in different contexts and time periods.



E-Portfolio leads to improvement in the learning process and authentic assessment of students. E-Portfolios make students responsible for organizing and producing something for a specific purpose, evaluating their work, and reflecting on findings regarding their own learning processes, experiences, and skills (Goldsmith, 2007). Consequently, electronic portfolios contribute to students exercising control over their own education and this motivates them to learn to do so (Akçıl & Arap, 2009). E-portfolios also facilitate and document their experiences in an authentic way (Reese & Levy, 2009). In addition, students are responsible for their own electronic portfolios, so electronic portfolios make student learning more individual and personal (Schmitz, Whitson, Heest & Maddaus, 2010). This whole process results in autonomous students because electronic portfolios help them to be the designers of their education and make them aware of the importance of factors, procedures and attitudes in learning (Gonzalez, 2009).

E-portfolios allow students to reflect on whatever they've been working on. They need reflection because reflection makes students think critically, make analytical reasons, and integrate their critical thinking and analytic reasoning into their learning (Rhodes, 2011). While reflecting, students review their learning experiences and begin to see how they view their learning in a more different way (Lin, 2008). Students develop goals and focus when they reflect on them and they compare their work against certain standards (Lin, 2008). In this way, they can learn whether their work meets standards or not and whether it is the best way to meet standards (Lin, 2008). Therefore, students are supposed to actively participate in presentations and representations of their learning, so that they can be motivated and try to do their best (Rhodes, 2011). Electronic portfolios provide individual feedback to them about learning, experiences, achievements, strengths and weaknesses (Goldsmith, 2007). As a result, students can enhance their learning through self-reflection and feedback.

According to Zimmerman (2000), self-regulated learning is defined as “self-generated thoughts, feelings, and actions that are planned and adjusted in cycles for the achievement of personal goals. In the academic realm, it requires planning and time management, attention and focus on education, training, signaling, and organizing information, creating a productive work environment, and making effective use of social resources (Schunk & Zimmerman, 1997). Pintrich (1995) also states that academically it has a self-directed process that meets requiring learners to monitor, control and evaluate its effects, cognition, behavior, and certain aspects of the environment. In addition, according to Bandura (1986), personal, behavioral and environmental processes are interactive and necessary in self-regulation. In addition, several psychological components include motivation,



strategy, self-awareness of performance outcomes, and sensitivity to environmental and social settings in self-regulation (Zimmerman & Risemberg, 1997).

Humans are programmed to speak before they learn to read and write. In any case, humans spend more time interacting verbally with language than in writing. Speaking is the most important skill because it is the skill needed to have a conversation. Speaking English is not an easy task because speakers must know many important components such as pronunciation, grammar, vocabulary, fluency, and comprehension. Students must have sufficient English proficiency to communicate easily and effectively with others. It is a fact that language is learned by speaking first after listening to sounds, words, and phrases in adri environment sentences (Anuradha, Raman & Hemamalini 2014).

## **RESEARCH METHODS**

### **Design**

This research is a quasi experiment or quasi-experimental research. The research design used was a posttest-only control group design.

### **Location**

This research was conducted in English Education Study Program of the Ganesha University of Education in Speaking for Social Interaction class in the academic year 2019/2020.

### **Population**

The population of this study were students of the even semester of the English Education Study Program for the 2019/2020 academic year which consisted of 7 classes, namely classes A-G. The number of students in each class ranges from 35-37 people. So the total population in this study was 245-260 people.

### **Sample**

The sampling technique used was cluster random sampling. The sample in this study consisted of 2 groups, namely the experimental group and the control group. The experimental group consisted of 35 students, while the control group consisted of 33 students. The experimental group will learn speaking skills with the help of e-portfolios, while the experimental group will learn speaking skills without the help of e-portfolios.

### **Data collection technique**

The data collection method used is a test method for students' speaking skill. Students will be given instructions, then will demonstrate their speaking skills, which will be assessed using an



English speaking assessment rubric. The questionnaire will be used to collect data on students' Self-Regulated Learning in relation to their English speaking skills and online learning.

### **Instrument**

The test used was a test of English speaking skills. This test was prepared by researchers themselves based on the syllabus of the Speaking for Social Interaction course in the English Education Study Program. The questionnaire used was a questionnaire regarding Online Self-Regulated Learning which was adapted from Barnard-Brak, L., Paton, V. O., & Lan, W. Y. (2010).

### **Data analysis method**

The data obtained from this study, namely in the form of speaking skill test scores and self-regulated learning questionnaire scores was analyzed quantitatively by statistical tests. There are two types of analysis that was carried out, namely, the analysis prerequisite test and hypothesis testing. The prerequisite analysis test includes the normality and homogeneity test of the data. Data normality and homogeneity tests was carried out with the help of SPSS analysis software. Meanwhile, the hypothesis test that was carried out in this study is the two-way ANOVA. Hypothesis testing will also be carried out with the help of the latest version of SPSS analysis software.

## **RESULTS AND DISCUSSION**

After carrying out the treatment (treatment) of the study, both in the experimental group and the control group, data was obtained regarding the results of the post-test speaking skill and the results of the self-regulated learning questionnaire. This section describes the results of the research, the results of data analysis, and a discussion of the results of the research.

### **The effect of E-portfolio and SRL on students' speaking skill**

From the results of the implementation of research treatment, it is obtained data on the results of students' speaking skills and data from the student's Self-Regulated Learning questionnaire. After the data has been collected, data analysis is carried out in the following stages:

#### **Normality Test**

Because the Sig. > 0.05 which is equal to 0.266, it can be concluded that the Standard Residual value is Normal.





## Tests of Normality

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Standardized Residual for Hasil	.108	68	.047	.978	68	.266

a. Lilliefors Significance Correction

## Homogeneity Test

Based on the results of testing with SPSS, the Sig value was 0.334. Because the Sig value of  $0.334 > 0.05$ , it can be concluded that the variant of the Post-Test Speech Skill variable is homogeneous. So that the assumption of homogeneity in the two way ANOVA test is fulfilled.

### Levene's Test of Equality of Error Variances<sup>a</sup>

Dependent Variable: Hasil *Post-Test* Kemampuan Berbicara

F	df1	df2	Sig.
1.154	3	64	.334

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Kelompok + SRL + Kelompok \* SRL

## Hypothesis testing

Hypothesis testing conducted in this study is a two-way ANOVA (two-way ANOVA) with the following results:

### Descriptive Statistics

Dependent Variable: Post-test result of Students' Speaking skill

Research Group	Self-Regulated Learning	Mean	Std. Deviation	N
Experiment	High	90.79	2.914	14
	Low	85.53	2.695	19
	Total	87.76	3.808	33
Control	High	79.72	3.611	18
	Low	67.94	4.054	17
	Total	74.00	7.067	35
Total	High	84.56	6.465	32
	Low	77.22	9.514	36
	Total	80.68	8.958	68



The table above is the statistical descriptive result of the data. From the results above, it can be seen that the speaking skill of students with high SRL, both in the experimental and control groups, is higher than students with low SRL.

Dependent Variable: Post-test result of students' speaking skill

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	4651.236 <sup>a</sup>	3	1550.412	136.742	.000
Intercept	440196.339	1	440196.339	38824.103	.000
Group	3442.152	1	3442.152	303.588	.000
SRL	1217.823	1	1217.823	107.409	.000
Group * SRL	178.376	1	178.376	15.732	.000
Error	725.646	64	11.338		
Total	447968.000	68			
Corrected Total	5376.882	67			

a. R Squared = .865 (Adjusted R Squared = .859)

From the table of hypothesis test results above, it can be concluded as follows:

1. Obtained a Sig value of  $0.000 < 0.05$  in the variable variable group, so it can be concluded that there is a difference in the results of students' speaking skill post-test based on between the experimental and control groups;
2. Obtained a Sig value of  $0.000 < 0.05$  on the SRL variable, so it can be concluded that there is a difference in the Post-Test Results of students' Speaking Skill based on the Level of Self-Regulated Learning;
3. Obtained a Sig value of  $0.000 < 0.05$ , so it can be concluded that there is an interaction between the Research Group and the Level of Self-Regulated Learning in determining the results of the students' speaking skill post-test;

### **The difference in speaking skill between students with high and low SRL**

From the results of data analysis with the help of SPSS as below, it was found that there were differences in students' speaking skills based on the SRL level.



### Tests of Between-Subjects Effects

Dependent Variable: Post-test result of students' speaking skill

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	4651.236 <sup>a</sup>	3	1550.412	136.742	.000
Intercept	440196.339	1	440196.339	38824.103	.000
Group	3442.152	1	3442.152	303.588	.000
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Group * SRL	178.376	1	178.376	15.732	.000
Error	725.646	64	11.338		
Total	447968.000	68			
Corrected Total	5376.882	67			

a. R Squared = .865 (Adjusted R Squared = .859)

From the table above, it is obtained that the Sig value is 0.000 < 0.05 in the SRL variable, so it can be concluded that there is a difference in the results of students' speaking skill post-test based on the level of self-regulated learning

## CONCLUSIONS AND SUGGESTIONS

### Conclusion

Based on the results of research on the effect of e-portfolio and SRL on students' speaking skill, it can be concluded that the following are:

1. There is an effect of e-portfolio on students' speaking skill.
2. There is an effect of self-regulated learning on students' speaking skill.
3. There is an interaction of differences in students' speaking skill based on the level of students' self-regulated learning.

### Suggestion

Based on the above conclusions, there are several suggestions that can be formulated:

1. E-portfolios are very good to use in learning about speaking skills.
2. Self-regulated learning has an effect on students' speaking skill. For that, it would be very good to be noticed and conveyed to students so that they can increase their SRL, so that it has a good impact on students.



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# Strategy for Implementation of Construction Works During the Pandemic

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## ABSTRACT

One of the sectors that have felt the impact of Covid-19 is the construction sector. The availability of quality infrastructure has an important role in improving public services and developing the national and regional economies. Restrictions on social interactions and human gatherings in public places have made various jobs, including construction work, stop and be temporarily delayed. Operational risk is related to the implementation of construction work. How to identify these risks and what strategies did construction workers carry out in carrying out their work during the current Covid-19 pandemic. Conducted with a qualitative approach, through literature study and documentation. By referring to the Covid-19 control guidelines in the construction sector and through coaching the construction workforce. Construction is still ongoing during the Covid-19 pandemic, of course, by applying predetermined health protocols, and not moving places during project work, then using materials and methods of carrying out construction work that can prevent the spread of the Covid-19 virus.

*Keywords: Strategy, construction, pandemic*

## 1. Introduction

Covid-19 natural ability to create disruptions and destructive effects has made economic and social changes in sectors and businesses globally [1]. Pandemic is not only a concept related to health, but a concept that will bring about changes that will provide new boundaries to form a new habit / New Normal to be applied forever [2].

The Covid-19 pandemic has weakened various sectors in Indonesia, including the construction sector. There are various internal and external factors that influence during project implementation. The conditions of the Covid-19 pandemic that occurred in Indonesia and around the world became



one of the external factors that hindered project completion. Many construction projects have stalled due to this pandemic. This occurs because the construction industry is interdependent with other business sectors. Restrictions on social interactions and human gatherings in public places have made various jobs, including construction work, stop and be temporarily delayed.

Given that the construction industry is one of the important components in the national economic development agenda. The construction industry was still running during the pandemic but is experiencing a slowdown. Several statements said that the impact of the corona virus on the construction sector in Indonesia was insignificant and that the work on projects was still ongoing. However, according to [3], in order for construction services to remain standing, in the industrial era 4.0, it is necessary to share knowledge (information, communication, coordination), data management, new technology and technical adaptations in the form of innovations.

## **2. Research Methodology**

The study was conducted to find out about how to control risks and what strategies were carried out in the implementation of construction work during the current pandemic through literature studies.

## **3. Literature Review**

### **The Covid-19 pandemic**

Currently the spread of the pandemic influenza virus outbreak is more extensive and covers almost the entire world. Covid-19 has a more specific character and has a broad impact on health, social and economy. In terms of health, the virus enters the human body through the upper airway (nose, mouth and throat) and ends up in the lungs [4]. Covid-19 is a disease caused by the corona virus, which is a serotype A influenza virus that can mutate at any time (major antigenic changes-antigenic shifts).

### **Strategy**

Strategy is an overall approach that is concerned with implementing ideas, planning, and executing an activity over a period of time

In a good strategy there is work team coordination, has a theme, identifies supporting factors that are in accordance with the principles of implementing ideas rationally, is efficient in funding, and has tactics to achieve goals effectively.





## **Implementation of construction**

Purpose of construction implementation according to [5], it is stated that the construction implementation stage aims to realize the building needed by the project owner and has been designed by the planning consultant within the agreed cost and time limits, as well as with the quality indicated. According to [6], stating that the types of construction work can be grouped into three main parts as follows:

- Design and engineering.
- Procurement of materials and services, including subcontracting.
- Working on construction.

In the implementation of construction work, there are times when a breakthrough method is needed to solve various problems in the field. Especially at times when there are obstacles caused by conditions in the field that are not in accordance with previously thought, this is also the case during the current pandemic construction. For this reason, the application of construction implementation methods that are in accordance with field conditions and risk mitigation will greatly assist in the completion of construction projects effectively and efficiently.

Risk is the variation in things that may occur naturally in a situation [7]. Risk is a threat to life, property or financial gain due to the danger that occurs [8]. In general, risk is associated with the likelihood (probability) of occurring events beyond those expected [9].

Risk management is all a series of activities related to risk, namely planning (planning), assessment (assessment), handling (handling) and monitoring (monitoring) risk [10]. The purpose of risk management is to recognize risks in a project and develop strategies to reduce or even avoid them, on the other hand, ways to maximize existing opportunities must also be sought [11].

**Risk response** Risk response is the action taken against risks that may occur. Important risks that have been identified need to be followed up with the response taken by the contractor in dealing with these risks. Methods used in managing risk [12] :

- 1) Risk retention, this is a form of risk management which a party will hold or take alone. Usually this method is done if the risks faced do not cause too large a loss or the possibility of the loss is small, or the costs incurred to overcome these risks are not too large compared to the benefits to be obtained.
- 2) Reducing risk (Risk reduction), namely actions to reduce the risk that is likely to occur by: education and training for workers in dealing with risks , protection against possible loss and protection of people and property



- 3) Transfer of risk (Risk transfer), this transfer is done to transfer risk to other parties. The form of risk transfer in question is insurance by paying a premium.
- 4) Avoiding risk (Risk avoidance), avoiding risk is the same as refusing to accept risk which means refusing to accept the project.

#### **4. Result and Discussion**

Construction work based on the Construction Services Law No. 2 of 2017 Central Government [13], is the whole or part of activities that include the construction, operation, maintenance, demolition and reconstruction of a building.

The strategy and leadership in the project is very tested in this pandemic, including:

- A. The PUPR Ministry issued Ministerial Instruction No. 02 / IN / M / 2020 concerning the protocol for preventing the spread of Corona Virus Disease 19 which includes the implementation mechanism for construction carried out by the government, local government, BUMN, and the private sector during the pandemic [14].

Broadly speaking, the Ministerial Instruction contains a protocol for preventing Covid-19 in the implementation of construction services, namely:

- 1) Covid-19 prevention protocol in the provision of construction services, which in this section contains a protocol scheme that was initiated by the formation of the Covid-19 prevention task force
- 2) Follow-up to construction service provision contracts
- 3) The Covid-19 prevention protocol in implementing the procurement of construction services, where this protocol regulates the implementation mechanism for the procurement of goods and services online and offline.

The ministerial instruction was then implemented by construction companies both state-owned and private, both at the head office and project operations, one of which was the implementation of Work From Home (WFH). This indicates, as stated by [15], that the virtual working environment will be more integrated with construction activities as a form of "new normal" and there will be flexibility in working due to adaptations to the application of new technologies. Thus in the implementation of construction during this pandemic period, it is also necessary to develop the competence of the workforce, which aims to reduce the risks that occur.



#### B. Strengthening K3

Based on Permen PU Number: 05 / PRT / M / 2014 [16], Occupational Safety and Health (K3) is all activities to guarantee and protect the safety and health of workers through efforts to prevent occupational accidents and occupational diseases in construction work. The implementation of K3, which has been an important part of the project, is tested to make the maximum contribution to safeguarding the entire team, both main contractor, subcon, vendor, and even project workers. In addition, details of contamination points and the movement of people are something that must be considered.

#### C. Progress and cash flow detailing.

Work progress is work that has been done by the provider / partner in accordance with the work plan and drawings and requirements. Cash flow is a financial report that contains the effects of cash from operating activities, investment transaction activities, financing / financing transaction activities, and net increase or decrease in cash in a company during a certain period. Progress on the ground can be a challenge to watch out for during this pandemic. Progress that is not considered will aggravate cash flow. Ensuring that progress can be slowed down, and progress that is still on target must be considered.

#### D. Application of Digital Construction and Lean Construction

Building Information Modeling (BIM) is one of the applications of digital technology in the AEC (Architecture, Engineering, Construction) field which is used to simulate a series of development information in the 3-dimensional realm. Lean construction is a way to design a production system that can minimize waste from material use, time and effort in order to produce a maximum value [17].

The moment when there is a large-scale physical distancing makes the project meetings to be carried out effectively and efficiently. Information should be presented quickly and not require many people in one room. Digital Construction which is integrated with Lean Construction is something that can be implemented in the project, in addition to providing integrated data during meetings, progress updates and obstacles on the site that can be reported in real terms.

#### E. Prepare a plan when it rebounds

How the project team can get back to normal and catch up. Detailed plans based on government predictions, projection of progress that must be carried out, and social aspects must be considered.



A good strategy will allow the construction industry in Indonesia to catch up in the hold and slow down periods [18].

The first step that must be taken in controlling and preventing Covid-19 in the construction sector is analyzing the risk of hazards by mapping the potential risk of exposure in each work activity to a risk level, namely low, medium and high (work that is indoors, where there are suspect Covid-19 among them). Then risk control can be carried out, among others:

- 1) Use closed doors and walls, whenever possible, as a physical barrier to separate the worker from any individual experiencing symptoms consistent with Covid-19.
- 2) Administrative controls to reduce or eliminate risk of exposure. By implementing standard operating procedures according to the Centers for Disease Control and Prevention (CDC), OSHA, and local guidelines to prevent the spread of Covid-19 infection. Training for employees on the spread of disease in the geographic area where they work. Implement safe work practices by selecting all people who will enter the workplace, for example: a rapid test or swab before entering the site, adopting a rotating work schedule and by implementing a stay at site system, meaning that once they enter the site, they are not allowed to leave, inside. site project provided barracks where to stay.
- 3) Using personal protective equipment (PPE) can include gloves, eye protection, and / or face shields.

Apart from that, in implementing construction work, it can be done using a composite structure. The composite structure is able to reduce the transmission of Covid-19. Application of a good design using a composite structural system, namely: where the columns and beams are made of steel structures, with concrete core walls, and floors using decking.

The advantages of the composite structure system in reducing Covid-19 transmission are: column and beam structures are done in a steel work shop, so that it can be done automatically or semi-automatically, labor is reduced, so that transmission can be reduced. The column reinforcement fabrication is also carried out outside the site, after completion of the column reinforcement fabrication results are installed in the field with less labor. The floor uses decking, which is very easy, fast and uses less labor, thus reducing the rate of transmission. According to [19], using a composite structure system, so that the use of less labor.



Figure 1. Implementation of construction work during a pandemic (implementing Health protocols and using composite structures)

#### 4. Conclusion

Some overall approaches related to planning and execution of construction during a pandemic are integrating government policies related to the protocol for preventing the spread of the corona virus disease 2019 (covid-19) in the implementation of construction services, namely through the PUPR Minister Instruction No. 02/2020, strengthening the implementation of OHS, progress and cash flow detailing, digital application and lean construction, rebond planning and risk control hierarchy, among others by implementing a stay at site system and by using construction work materials and methods that can prevent the spread of the Covid-19 virus.

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# Singing Method: Introducing the Concept of Tri Hita Karana for Early Children During the Covid-19 Pandemic

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## ABSTRACT

Entering school age children have begun to be introduced to values related to what is and aren't, what should be done, and things that are prohibited. This study aims to determine the singing method as a way to introducing the concept of Tri Hita Karana to early childhood during the Covid-19 pandemic, including introducing the concept of Parhyangan, Pawongan, and Palemahan. Data obtained through observation, interviews, and document study. The collected data presented in a descriptive qualitative form. The results of this study contributed to the early childhood teachers and parents of students to be able to apply the singing method as a way to introduce the concept of Tri Hita Karana to early childhood during the Covid-19 pandemic. The teacher gives examples of singing songs in the form of videos, voice recordings, and photos of song lyrics that can be recorded and shared with students via online. Kindergarten schools should develop a fun educational pattern by introducing children's songs that reflect the teachings of the belief in God's omnipotence, tolerance with others, and love for the natural environment. During the Covid-19 pandemic, collaboration skills have been created between teachers and parents of Sari Mekar Sukawati Kindergarten School and Suta Dharma Kindergarten School, Ubud.

*Keywords: Singing Method, Tri Hita Karana, Early Childhood, Covid-19*

## I. INTRODUCTION

The Covid-19 pandemic is forcing changes in all sectors of life. One of the areas that has the most impact is the education sector. The paradigm shift from the conventional face-to-face learning process has turned into an online or networked learning process. This learning model is very much felt at the Early Childhood Education level. This forces teachers and parents to think about various ways, strategies and methods of online learning that are suitable for early childhood abilities.





Suasthi (2020: 22) describes that the physical, mental and social children in Kindergarten are still developing. Furthermore, Siti Rahayu (2006: 33) explains that the stage of observation development; (4 to 6 years old). In fact, observation of children has started to develop rapidly since the child was 2 years old. In fact, the function of observing children at this age is very dominant, so it greatly affects the development of other personal aspects of the child. With the dominance of the development of children's observations at this age, the child's introduction to the surrounding environment is more widespread and focused. It also includes introducing holy verses or the *tri sandhya mantram* prayer and *gayatri mantram* to children from an early age.

Children begin to actively learn the intricacies of the natural surroundings with their very sensitive senses. Children enjoy listening to children's songs, children's stories, seeing gestures, objects and pictures. As stated by the Mayor of Denpasar, I.B. Rai Dharmawijaya Mantra, in the seminar on National Character Building through Family at Graha Swaka Dharma (Tuesday, 27 September 2016), that children's education is not only the responsibility of parents alone, but 33% responsibility of parents, 33% of teachers, and 33% of responsibility. environmentally responsible. Thus, it is necessary to introduce the concept of good parenting considering the increasing number of problems children have at this time.

In the lontar Putra Sesana II, 1 and 2 it is described as follows :

*I kang tanaya sawaknya tuwi yan tan imajar aruhanya ring hayu.*

*Kamudani yahyanya len liwat asihnya karana nika tan muwus riya.*

*Taya pwa pituturnya tandwa tikanang suta manasara sing jana maleh.*

*Suduryyasa nikang yayah dadi tekap ni pangawasani dosaning weka*

Meaning :

As a child he did not get a good education (due to) the inability of the parents, also because the parents spoil their children so much that they never advise them. Because it is not knowledgeable, then the child will make mistakes, everyone scoffs. Parents' mistakes in educating the children are wrong (Mimbeng et al., 1997: 93--94).

The Lontar description above emphasizes parents and adults around the child to give full attention by guiding, and giving examples of good behavior to children. Suasthi (2020: 80) further explains that Hindu religious values for early childhood should be chosen which are simple so that they are easier for children to understand, such as in the form of popular children's song compositions. Teachers can be creative by composing songs that contain poetry or meaning messages from the



teachings of the *Tri Hita Karana*. For example, to introduce *Parhyangan* teachings to foster children's confidence in the greatness of the creator (God). Like the example below:

1. Title : *Agama Hindu*

Tone : (*Satu-satu Aku sayang Ibu*)

Verse : *Satu satu Hyang Widhi Tuhanku*

*Dua dua Swastika lambangku*

*Tiga tiga Weda kitab suciku*

*Satu dua tiga Hindu agamaku*

2. Title : *Tri Murti*

Tone : (*Balonku*)

Verse : *Tri Murti ada Tiga*

*Brahma Wisnu dan Shiwa*

*Dewa Brahma Pencipta alam*

*Dewa Wisnu Pemelihara*

*Dewa Shiwa Pempralina Om*

*Semua adalah satu*

*Sang Hyang Widhi Tuhanku*

*Yang ku puja selalu*

Furthermore, to introduce the teachings of *Pawongan*, which is a teaching concept that teaches tolerance with others, such as an example of a song composition below:

1. Title : *Tat Tvam Asi*

Tone : (*Lenggang Kangkung*)

Verse : *Dia adalah kamu*

*Kamu adalah aku*

*Kita saling menjaga*

*Sesama ciptan Tuhan*

2. Title : *Salam Damai*

Tone : (*Lihat Kebunku*)

Verse : *Om Swastyastu Salam Agama Hindu*

*Semoga Selamat Kita Bahagia*



*Om Santih, Santih, Santih, Damai Kita Semua  
Saling Mengasihi Saling Menyayangi*

For the third concept of *Tri Hita Karana*, namely *palemahan*, a concept of introducing teachings to protect, care for, and preserve the natural environment, you can see examples of song compositions as follows:

1. Title : *Bersih Itu Indah*

Tone : *(Menanam Jagung)*

Verse : *Ayo kawan kita lakukan*

*Jaga lingkungan supaya bersih*

*Ambil sapumu, ambil sampahnya*

*Buanglah sampah pada tempatnya*

*Ayo siram tanaman bunga*

*Kupu-kupu cantik hinggap di bunga*

2. Title : *Bhuana Agung*

Tone : *(Lihat Kebunku)*

Verse : *Lihat Kebunku Penuh Dengan Pohon*

*Ada Berbunga dan Ada Berbuah*

*Setiap Hari Ku Siram Semua*

*Alam dan Isinya Semua Lestari*

3. Title : *Bhuana Alit*

Tone : *(Baru Bangun)*

Verse : *Rutinlah Mencuci Tangan*

*Jaga Badan Tetap Bersih*

*Hari Minggu Ku Potong Kuku*

*Agar Tubuh Tetap Sehat*

## **II. LITERATURE REVIEW**

Learning from Home through Distance Learning in the Minister of Education and Culture Circular Letter Number 4 of 2020: (1) Providing meaningful learning experiences for students, without being burdened with demands to complete all the achievements of the curriculum for class promotion and graduation. (2) Focusing on life skills education, among others, regarding the Covid-



19 pandemic. (3) Provide a variety of activities and learning assignments from home between students, according to their respective interests and conditions, including considering gaps in access / learning facilities from home. (4) Provide feedback on evidence or products of learning activities from home that are qualitative and useful for teachers, without being required to give qualitative scores / scores.

Singing makes the learning atmosphere cheerful and excited, so that children's development can be stimulated more optimally. Kendall, 1996 in (Seefeldt 2008: 311) states that every culture has its own folk songs. By introducing this to children, teachers not only show respect and respect for other people's cultures but also show children that all cultures are united through song and music. Related to this, playing while singing are two things that are inherent in early childhood life. Choosing the right song according to psychological development and the environment in which the child grows, as a method can help children understand the subject matter. Through the composition of the children's song with *Tri Hita Karana* insight. Superior children are diligently praying / praying as a reflection of the aspect of *prahyangan*, then children who have an empathetic and courageous attitude as a mirror of the *pawongan* aspect, and children who are agile and healthy as a reflection of the aspect of *palemahan*.

The *Tri Hita Karana* elements are found in the holy book Bagawad Gita (III.10), which reads as follows:

*Sahayajnah prajah sristwa  
pura waca prajapatih anena  
prasawisya dhiwan esa  
wo'stiwistah kamadhuk*

Meaning :

In ancient times Prajapati created  
man with his *yadnya* and said  
with this you will develop and  
will be the *kamadhuk* of your wish (Pudja, 1999:84)

Rinayati, Zen (2018) in his research entitled Increasing Religious Value Through Singing Methods to Student of Kinder garden. The purpose of this study was to describe the increase in



religious values of the singing method in teaching students of TK B. Adzkia V Padang. It is concluded that the singing method can improve children's religious values.

Some of the results of the above publications have generally discussed the problem of children getting meaningful learning while learning from home during the Covid-19 pandemic. Nothing has specifically discussed introducing the teachings of *Tri Hita Karana* through the singing method in early childhood. The purpose of this study is to build superior human resources (human resources) who have academic intelligence, social personality or character and spirituality. So specifically this publication discusses the singing method: introducing the teachings of *Tri Hita Karana* to early childhood during the Covid-19 pandemic. However, some of these literature reviews have provided valuable references for the preparation of publications that discuss the singing method: introducing the teachings of *Tri Hita Karana* to early childhood during the Covid-19 pandemic at the Suta Dharma Kindergarten School in Ubud.

### **III. MATERIALS AND METHODS**

This publication is the result of a study at the Suta Dharma Kindergarten School in Ubud. The determination of the object and location of this research is based on the following reasons: (1) Suta Dharma School, which is under the auspices of the Tri Sula Foundation, is one of the large and growing PAUD and Elementary School educational institutions in Ubud, Gianyar. (2) The Suta Dharma Kindergarten Elementary School develops as a basic education that presents the characteristics of the Balinese region with local wisdom and culture of the Hindu community. (3) In accordance with the policy, students continue to learn from home (BDR) has the potential to build character human resources. Besides obtained through document study, research data collection was also carried out through observation and in-depth interviews with 9 informants, namely teachers and parents of students. The data collected was then processed and presented in descriptive-qualitative form.

### **IV. RESULTS AND DISCUSSION**

#### **4.1 Implementation Process of Parhyangan Aspects**

*Parhyangan* concept recommends that as a human being, it is obligatory to carry out *sradha* and *bhakti* in organizing life in the world in order to obtain a quality life. Such as Praying before meals, praying activities or *Tri Sandya* every day, praying before and after learning time,



commemoration of religious holidays. Regarding this, the results of the interview with Ni Wayan Warsiti confirmed the following:

The habit of praying or praying to children from an early age should be started from the example of the parents or the closest adult in the child's environment. This makes it easy for children to see role playing as a model that can be imitated directly by children. The closeness of parents with children in their childhood will determine the optimal development of children's potential, especially the development of cultural values and norms in their environment (interview, February 2, 2021).

From the research results it was found that the process of introducing Parhyangan teachings was at the time of carrying out :

- a. Praying before entering and before returning home is an inculcation of the value of the *Tri Hita Karana* teachings that are given since early childhood. This aims to equip children in the future to have good habits and behavior, through choosing or composing the right song, so that it makes it easier for children to understand the contents of the message and subject matter. The competencies and learning outcomes to be achieved in each aspect of development are in the aspects of developing moral and religious values, the competence and learning outcomes to be achieved are the ability to do worship, know and believe in God's creation and love others.
- b. The morning circle program is carried out every day. The program is filled with activities that focus on the development of religious, cognitive, language, physical motor and social emotional values of children. Activities carried out by children in the classroom are filled with 6 areas of development in kindergarten such as: religious and moral values, social emotional and independence, language, cognitive, physical motor skills and arts.
- c. Prayer program together on the holy day of *Purnama, Tilem, Kajeng Kliwon*, and other holy days. Meanwhile, in one month the children can carry out the prayer program four times at school. Thus the religious moral values of children can grow and develop. Likewise, children can follow religious songs, imitate the movements of the stages of worship, pray before and after eating, before going to bed, and other activities. Make it a habit to say polite words such as apologize, ask for help, and thank you. On this basis, religious education in children needs to be actualized in everyday life, such as being devoted to parents, being helpful, willing to share toys, respecting elders, and so on.



- d. The end of the learning hour program is relaxing for the child and is given classically. As stated by Ni Wayan Warsiti as follows.

The teachers in each class try to choose and compose a song just before the children leave. The lyrics or words in the song contain a message so that the children will return home in an orderly and joyful way and keep their spirits up the next day to come to school. The teachers also advised the children when they got home to put their school supplies such as bags, clothes, shoes in place. Wash your hands immediately before and after eating and pray for the safety of all of us. One of the activities above, we agreed to ask parents of students to record and send in video form (interview, 7 February 2021)

#### **4.2 Implementation Process for Pawongan Aspects**

*Pawongan* teachings encourage people to always maintain tolerance among fellow humans, build unity by creating harmonious togetherness. The Reg. Veda X.191.4 (Wiana, 2007: 127) provides a strong foundation for maintaining the unity of life as follows:

*Samani va akutih samana hridayani vah,  
Samanamastu vo mano yatha vah susahasati*

Meaning :

O humanity, may you progress with the same intentions. May your heart (your mind) and your mind be the same as one another. So that you can be organized (arranged) uniformly.

To strengthen tolerant behavior, students also foster harmonious relationships between their peers from the beginning of their education at the Playgroup and Kindergarten level until elementary school later, students need to get guidance from teachers. As stated by the teacher PJOK I Gusti Ngurah Dwipayana as follows.

Children are accustomed to being guided and trained by giving support and encouragement to their friends who excel, and always apologize when they make mistakes to their friends, and children are accustomed to accompanying and comforting their friends' feelings when someone is sad. Likewise, the support from Class I Teacher, Ni Luh Ririn Suastini, explained that our children are trained to be accustomed to saying greetings and always smiling kindly to all friends, to the teachers, staff, security guards, and guests who visit the school. Our children are always guided to say thank you when they get help. However, during the Covid-





19 pandemic, we asked parents to record children's activities greeting teachers and friends, then shared in the group in the form of videos. Students are also asked to sing songs such as *Aku Sayang Ibu, Ibu dan Ayan Selamat Pagi, Here Senang Di Sana Senang*, and others related to pawongan teachings (Interview, 6 February 2021).

The description of activities that are accompanied by children's joy is an emotional expression that is cheerful, happy, and fun. Children who experience joy are manifested by smiling and happy expressions. Singing is a means of expressing soul feelings or emotions, which are sometimes difficult to express in spoken form. In this case, by singing, children can learn to understand their emotions, namely the ability to recognize their own feelings and feelings of others, and the ability to manage emotions well in themselves and in relation to others.

Sayudi (2010: 108) further explains that emotional development must intersect with children's social development. Likewise, conversely, discussing social development must involve emotional development. Because both are integrated in a complete psychological frame. Hurlock stated that in general the pattern of children's emotional development includes nine aspects, namely fear, shame, worry, anxiety, anger, jealousy, joy, curiosity, and joy. So in this pandemic condition, teachers motivate children through the parents of students to train their children's talents, because before the pandemic, the exploration of children's talents was mostly done in schools. Currently the teacher only asks parents of students to train the child according to the child's potential and the time and opportunity of the parents. For example, dancing, singing, storytelling, and drawing in English.

#### **4.3 Palemahan Aspect Implementation Process**

The concept of *Palemahan* teaches humans to live in harmony with nature. Because nature provides a variety of human needs in the form of plants, animals, water, air, which are very abundant, so that people with full awareness must protect nature and its contents by carrying out the *Bhuta Yadnya* ceremony (Wiana, 2007: 165).

The Rg Veda III.51.5 mantra explains the following:

*Indraya dyava osadhir utapo rayim raksanti jirayo vanani.*

Meaning :

Protect natural resources such as the atmosphere, plants and medicinal herbs, rivers, water sources and wilderness.



In relation to early childhood education, early childhood really needs an orderly environment, comfortable and safe from disturbances or dangers in their environment, both at home and at school. As Seefeldt (2008: 180) explains, a pleasant and beautiful environment is able to calm children. Soft colors, soft light, art prints, growing plants, and clean, tidy, organized materials are arranged to beautify the room. In addition, too much noise or loud music will irritate a child, especially one who is tired and easily aroused. The fun day for life skill program meant that every child needed space to develop according to their respective potential. The development of children's potential can be through gardening activities, sorting waste, raising livestock, and practicing a healthy lifestyle. It is hoped that children can express what they want with joy. As described by Ni Wayan Warsiti as follows.

In guiding the development of children at Sutha Dharma Kindergarten, we are always committed to advancing the quality of education from time to time. Previously, to broaden the students' insights and knowledge, various activities had been held, such as Contextual Teaching and Learning (CTL) activities such as animal introduction, professional introduction, Kids camp and outbound activities. There are also special activities such as home visits, performing arts, market day farming, batik day, week book, English day, cooking class, international day, guest teachers, mothers day, story telling, colors day, one day with daddy, family day, fruits and vegetables day. There is also personal development such as dancing, music, coloring, singing, computers and abacus. However, in the current pandemic era, we only urge and motivate parents of students to focus more on introducing children's songs (interview, 7 February 2021).

All of the above activities can train children to develop interests, choose healthy foods, increase endurance, hone children's motor skills, teach responsibility, train memory and focus. During the online learning process, all of these activities are mostly carried out at home with parents or family.

## **V. CLOSING**

### **5.1 Conclusion**

The process of implementing *Tri Hita Karana*-based songs in the *Parhyangan* aspect through: praying before entering class and before returning home, the morning circle program, filled with activities to introduce children's religious, cognitive, language, motor, and social emotional values.



The *Pawongan* aspect includes routine programs that are carried out every day such as morning circles, eating together, and brushing teeth. In addition, the exploration of children's interest talents such as Balinese dancing, computers, drum bands, modeling, and drawing in English in the Bali Dwipa program, *megending*, *mepalian*. Furthermore, in the *Palemahan* aspect, the Fun Day for Life Skill program is carried out, honing children's motor skills, building responsibility by sorting and disposing of waste, introducing healthy lifestyles, and introducing the open nature of both flora and fauna through the Day Out program. During the Covid-19 pandemic, most of the above activities were carried out at home and then shared online.

## 5.2 Suggestions

Kindergarten teachers and parents are expected to be able to develop meaningful and fun educational patterns by introducing children's songs that reflect the teachings of the belief in God's omnipotence, tolerance with others, and love for the natural environment.

## 5.3 Findings

During the pandemic, the Covid-19 has created collaborative skills between teachers and parents of Kindergarten School students. Furthermore, the existence of information technology for online learning becomes a means of learning methods that are meaningful and fun. The principle of parents as first and foremost educators is realized to help develop children's potential optimally.

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## CASE STUDY: Hyperlipidemia

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### ABSTRACT

Health is the most precious asset for everyone and increasingly more so. Too long taken for granted, without health the net worth of everything else becomes negligible. Hence, we have to take care of our health to become productive, as stipulated by the World Health Organization and proven in real life, that health is not merely the absence of disease but also includes productive social life. Below please allow us to share our clinical experience in treating Hyperlipidemia, hoping it will inspire others to overcome diseases or better at it. Most people do not usually experience any symptoms, but having hyperlipidemia increases the risk of developing heart disease and increases the risk of stroke and death. In the United States, about 1 in 3 people have hyperlipidemia. Primary hyperlipidemia derives from a myriads of genetic disorders that a patient may inherit through birth, while secondary hyperlipidemia typically originates from an alternate underlying etiology, such as an unhealthy diet, medications (glucocorticoids), hypothyroidism, uncontrolled diabetes, and or a poor lifestyle regiment. [1] People who have obesity, compared to those with a healthy weight, are also at increased risk for many serious diseases and health conditions, including hyperlipidemia [2].

*Keywords: 1. Blood Triglyceride. 2. Atherosclerotic plaques. 3. Fu Fang Dan Shen*

### PATIENT PRESENTATION

On 29/05/2019, 56-year old male came in with difficulty in climbing stairs and very high blood Triglyceride level (1,151 / 150 mg/dL), abnormal sleep and bowel motion once every 2 days. Tongue: coat white thick, on purplish tongue  
Radial pulse: wiry.



## **CURRENT SYMPTOMS**

Since 7<sup>th</sup> May 2019, patient discovered his Triglyceride level was at 1,151/150 mg/dL after a routine lab exam. He noticed that the nurse was having difficulty to draw blood from his vein and the nurse commented that his blood was “very thick”. His liver and kidney panel and full urine lab work however were normal, with cholesterol at 233/200. Fasting glucose was 124/100 mg/dL HbA1c at early Diabetes level. LED was also normal at 12/20 mm/hr.

## **PHYSICAL EXAMINATION**

General condition unremarkable. Physical constitution is slim with slight bulging belly, Shen is lucid and relaxed. Pupils reflexes to light were normal.. His tongue was purplish with thick white coat, teeth marks absent. No obvious odor emanated from patient. Upon asking he recounted that over the last 3 months he has had 4 to 5 times restaurant take out dinner per week, while routine physical exercise has been declining. Sleep was regular so was urine and bowel motion until recently when bowel motion became every 2 days. On palpitation, his whole abdomen was soft and slightly bulging from excess fat, liver and spleen region were negative, M.C. Burney and gall bladder point were similar, bladder was not palpable. Legs were not swollen, nor his face.

## **SYNDROME DIFFERENTIATION AND TREATMENT**

**Syndrome differentiation:** Dampness stagnation in the meridians, mainly in the liver and heart meridians. The first half of the Chinese saying of “diseases enters from the mouth, trouble comes out of it” fitted quite well in this case, which more often than not, applies to many in a similar range of age, where sedentary life style and insufficient physical activities can cause an otherwise regularly healthy body to go south in a matter of months, to the level of seriously putting his health and life at risk.

**Treatment:** Dampness purging, Invigorate Liver to regulate Qi, activating blood stasis in the heart meridian. Slow regular regimen of physical activities be added into patient’s routine, as his physical conditions improves and allow, with close and regular medical monitoring.

## **ACUPUNCTURE**

LIV-03 (tai chong), ST-40 (feng long), LI-11 (qu chi)



### **HERB AL MEDICATION:**

**FuFang Danshen 复方丹参 3x 6 tab x 14 days (oral) [3]**



**Hua Zhuo Zhi 化浊脂 3x4 capsules x 14days (oral) [4]**



### **INITIAL RESULTS**

Patient second visit 2 days later, his bowel motion had normalized. On his 3<sup>rd</sup> visit 02/07/2019, sleep was also improving. 4<sup>th</sup> visit 05/07/2019: a measurement of his blood cholesterol showed 179. mg/dL Uric Acid: 5,8 mg/dL. Total needle retention time: 20 minutes with electro stimulation.

### **FOLLOW-UP RESULTS**

After 4 visits patients returned on 19/11/2019 with no previous or new complaints, blood Cholesterol was again tested showing 187 mg/dL and again on 10/02/2020 showing 199 mg/dL.

Triglyceride was not tested again until 25/08/2020 showing Cholesterol 133 md/dL and Triglyceride: 173 mg/dL.





## DISCUSSION

Hyperlipidemia is a condition that involves various innate and acquired disorders which manifests itself in elevated lipid levels within the human body. Hyperlipidemia is extremely common, in the Western hemisphere, but also throughout the world. **The resulting Atherosclerotic** plaques [5] and the subsequent vascular disease coming from hyperlipidemia ranging from coronary heart disease,[6] to cerebrovascular diseases [7], is the main reason that we need anyone suffering from it, to seek treatment. From the Chinese Medicine standpoint, hyperlipidemia is a syndrome that constitutes the pathogen of “phlegm” [8], constricted “Qi” flow[9],“dampness”[10] even “blood stasis”[11] that create stagnation in the meridians. When the syndrome is still in the early stage, it is a good opportunity to use Chinese medicine and its herbal remedies to address them, avoiding any strong pharmaceuticals medications adverse reactions or side effects.

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# Dharma Harmonious Approach for Sustainable Health, Families and Societies

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## ABSTRACT

We know that Buddha's teaching ie. Dharma is well known as The Middle Way. The Middle Way means not being in the extremes. In definition of health, Buddha also described it as "not too hot and not too cold", in line with the middle way. The descriptions are much in line with the modern scientific views of balance in physiologic homeostasis, and also with the 5.000 years old traditional Chinese medicine concept of Yin-Yang balance which is also recognised by WHO. It is a proof of the Dhammanusati, ie. Dharma is akaliko or timeless, that is prevailing for goods, also a proof (Ehipassiko) of the truth of Dhamma. The concept of middle way, balance, also very suitable for counteracting the present world challenge of extremism in ideology. So, in order to propagate Dharma sustainable harmonious approach in the society, empowerment of the society through education is the key. In the pluralistic (especially in religions) society like Indonesia, one of the most suitable way to propagate the central idea of Dharma is through non-religious approach. We have done it through the faculty of Dharma Usada which teaches Dharma healthcare ie. healthcare depicted from Tipitaka. The bachelor degree faculty was established since 2013 and have gained popularity among Buddhists and non- Buddhists. Now we have prepared to open the postgraduate faculty in Dharma medicine. By this approach, we could simultaneously propagate Dharma approach to harmonious families, healthcare and sustainable societies.

*Keywords: Dharma medicine, health, society.*

## Introduction

The Buddhist understanding of good health is similar to that of TCM, with its emphasis on the balanced interaction between the mind and body as well as between life and its environment. Illnesses tend to arise when this delicate equilibrium is upset, and Buddhist theory and practice aim



to restore and strengthen this balance<sup>[1]</sup>. Additionally, the Buddhist “Middle Way” blended in seamlessly with the concept of Yin-Yang balance in Chinese philosophy. The Buddha advocated the middle way of moderation, finding balance between the extremes of sensual indulgence and self-mortification. Maintaining *balance* is considered crucial to attaining physical and mental health, liberation and finally enlightenment.

Buddhism and TCM also converge when it comes to moderation of diet and lifestyle, which is thought to significantly contribute to one’s physical and mental health. An interesting point here is the reverence that is shown in China for Jivaka Komanabha, the important Father of Medicine in Thailand, herbal doctor and the personal physician of the Buddha. In the Chinese *Jivaka Suttas* it’s written that Jivaka, the “Medicine King,” was born with acupuncture needles and herbs in his hand<sup>[2]</sup>.

The concept of good health in Buddhism and TCM is in principle identical to the definition of health by WHO too. The preamble to the World Health Organization charter reads: "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity"<sup>[1]</sup>.

Sakyamuni, also called the Great Healer, had spent nearly four years in instructing Buddhist Medical System, with the aim to relieve the sentient beings from the sufferings of illness and to make it an important tool for disseminating Buddhism<sup>[3]</sup>.

Buddha also told us the causation of sickness including the external pathogenic factors like heat, cold, dampness, etc<sup>[4]</sup>. Besides, Buddha has taught many ways and modalities to achieve good health, including not eating at night, practicing meditation, chanting, eat moderately, needling, massage, sauna, herbs, aromatherapy, urine therapy, etc <sup>[4]</sup>. (AN I:62, IV:54; Vin. I:198-250, 205, 279; Chikitsa Vidya; S.I:174, S.III:250, D.I:7, etc). All those are natural way, using green environment friendly sustainable methods. When practiced accordingly one would achieve sustainable health up to the natural lifespan.

In order to propagate the universal virtue of Dharma medicine to the society, empowerment of the society through education is the key. In the pluralistic (especially in religions) society like Indonesia, one of the most suitable way to propagate the central idea of Dharma is through non-religious approach. We have done it through the faculty of Dharma Usada which teaches Dharma healthcare ie. healthcare depicted from Tipitaka. The bachelor degree faculty was established in 2013 and have gained popularity among Buddhists and non-Buddhists. By this approach, we could simultaneously propagate Dharma approach for the benefit of public health.



## Participate for public health problems

As we have known that the main public health problems nowadays are mostly related to man made problems or related to the greediness and negligence of mind. For example, the top 10 causes of death in the society worldwide<sup>[5]</sup> is related to cardio-cerebrovascular diseases ie. coronary heart disease and stroke, also metabolic diseases related to diabetes mellitus which are related to intake of unhealthy to much sweet, greasy foods causing atherosclerosis, inflammation of internal organs, and so on. The medical expert advice to prevent and treat them is always emphasizing on diet regulation. For diet regulation, the main obstacle is the mind that craves for tasty but unhealthy foods. So, the way to promote health is by cultivation of mind to control the craving sensation through the practice of meditation<sup>[4]</sup>.

By practicing meditation, not only one could control his/her craving, but would also achieve more harmonious relationship in the family and in the society, especially when one practices the five or more precepts as well. Many studies have proven the effects of meditation against stress related to various pathologic conditions and also beneficial impacts to social harmony.

Although meditation has been practiced for thousands of years, the meditative technique called the "relaxation response" was pioneered in the U.S. by Harvard doctor Herbert Benson in the 1970s. The technique has gained acceptance by physicians and therapists worldwide as a means of relieving symptoms of conditions ranging from **cancer** to AIDS<sup>[6,7]</sup>.

When our bodies are exposed to a sudden stress or threat, we respond with a characteristic "fight or flight" response. The "adrenaline rush" we experience is a result of the release of the hormones **epinephrine** (adrenaline) and norepinephrine. They cause an increase in **blood pressure** and **pulse** rate, faster breathing, and increased **blood** flow to the muscles<sup>[8]</sup>.

The relaxation response is a technique designed to elicit the *opposite* bodily reaction from the "fight or flight" response -- a state of deep relaxation in which our breathing, pulse rate, blood pressure, and **metabolism** are decreased. Training our bodies on a daily basis to achieve this state of relaxation can lead to enhanced mood, lower blood pressure, improved digestion, and a reduction of everyday stress<sup>[9]</sup>.

The teachings of Buddha reveal the step by step process of changing the state of mind for long lasting happiness. It makes the mind to become more positive and constructive so that the life experiences becomes more satisfactory and helpful for others<sup>[10]</sup>.

In order to achieve the goals, we need to introduce it into the curriculum of educational institutions. We have established the first bachelor degree Dharma Usada (Dharma medicine) college in Jakarta since 2013.



As the faculty of Dharma Usada is an integration between Buddhism and health studies, hence in the preparation of the faculty establishment, both ministries ie. ministry of religion and ministry of health of Republic of Indonesia were involved. In the opening ceremony of the faculty, the officials from directorate of traditional medicine Indonesia ministry of health were also present, besides those from health professional organizations.



Fig. 1. The opening lecture of Dharma medicine faculty on 9<sup>th</sup> September 2013, attended by officials from Ministry of Religion and Ministry of Health, as well as traditional medicine organizations representatives.



Fig. 2. The graduation ceremony of the first batch of bachelor in Dharma medicine (Sarjana Kesehatan Dharma) on 14<sup>th</sup> October 2017.

The first batch of graduates achieved the bachelor degree of Dharma medicine (Sarjana Kesehatan Dharma) on 14<sup>th</sup> October 2017. The graduates and students come from various religious background, including Moslem, Christian and also Buddhist. It is a symbolism of harmony through teaching of Dharma among various faiths.



All graduates are encouraged to follow ASEAN standard competency certification in traditional Chinese medicine exam organized by competency certification body recognized by Indonesian Ministry of Education and Culture and Ministry of Health, so that they would be ready facing the era of globalization and propagate the spirit of harmony in Dharma medicine throughout the region and beyond.

Just recently in January 2021, the Dharma medicine faculty has been accredited by Indonesian Higher Education in Health Accreditation Board (LAMPTKes). So that we are ready to open the post graduate master degree in health (M.Kes)/ Dharma medicine which is now already undergoing serial seminars attended by more than sixty candidate students mainly from nursing profession. So that in the near future the faculty of Darma medicine will flourish widely in Indonesia.

As a comparison, in China, Buddhist medicine has flourished since long ago within the Shaolin temple. The ingenious combination of the medicine of Chinese Buddhism and folk traditional Chinese medicine makes the distinctive Buddhist Medicine of China, such as Traumatology of Shaolin Temple and Gynecology of Zhulin Temple, etc. Traumatology of Shaolin Temple and Gynecology of Zhulin Temple, etc<sup>[11,12]</sup>.



Fig. 3. Buddhist medicine practice in Shaolin temple, China.

So, from the above description it is obvious that through education of Dharma, especially the Dharma Medicine, we could simultaneously propagate Dharma approach towards sustainable personal health, harmonious human relationship within family and for the goodness of public health.





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# Chuzhen Massotherapy From Taoism-Buddhism for The Welfare of All

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## ABSTRACT

Chuzhen or in western literature termed “Pestle needle” is a kind of massage treatment which has originated from Wudang Mountain in China more than five centuries ago, propagated by a Taoist master named Ruhuan Zhenren. The method is used to promote, maintain, and improve body condition, by stimulating meridians and acupoints on the body surface with manual manipulation. Now the method has been disseminated worldwide, among others to Indonesia. In Indonesia, it is propagated by Nalanda Buddhist College, TCM (traditional Chinese medicine) Practitioner Organization and TCM Practitioner Certification Board (LSK Sinshe) acknowledged by Indonesian Ministry of Education.

This article describes the sustainable process that this unique classical therapy has evolved from the Wudang Mountain to the academic world – mainly supported by Sichuan University of TCM and then to the global society at large. Researchers from Sichuan University of TCM has proven the method to be safe and effective comparable to acupuncture in regulating blood flow and treatment of various kinds of pain. We hope by sharing this matter will initiate further propagation of the simple, economic and effective health maintaining and improving measures to the participants of this international webinar.

*Keywords: Chuzhen, massotherapy, Pestle needle, TCM*

## Introduction

Health is the most precious thing, that is what Buddha tells us<sup>[1]</sup>. Buddha also tells what condition defines health, ie ‘having well-being, good digestion, not being over-cold or over-hot, balance and being capable of activity’ (A.III:103) is in principle identical to the definition of health by WHO and the definition of health in traditional Chinese medicine (TCM). World Health



Organization defines health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity<sup>[2]</sup>.

In TCM the condition of health is symbolized by Yin-Yang, ie. the balance between dark or cold (Yin) and bright or hot (Yang) elements<sup>[3]</sup>. The Yin-Yang symbol originates from Taoism, The yin and yang symbol represents the faith and principles behind Taoism. Just like a country has a flag and a company has a logo, the yin and yang symbol represents the Taoists and their beliefs and way of life<sup>[4]</sup>. Hence, in principle, the condition of health as defined by Buddhism and Taoism is identical.

Buddha also told us the causation of sickness and taught many ways and modalities to achieve good health, including not eating at night, practicing meditation, chanting, eat moderately, needling, massage, sauna, herbs, aromatherapy, urine therapy, etc. (AN I:62, IV:54; Vin. I:198-250, 205, 279; Chikitsa Vidya; S.I:174, S.III:250, D.I:7, etc)<sup>[1]</sup>. All are natural way, using green environment friendly sustainable methods. When practiced accordingly one would achieve sustainable health up to the natural lifespan.

In this article we would share our experience using special acupressure massage called Chuzhen therapy (pestle needle) as a simple, safe and effective tool to disseminate health maintaining and sustaining modality for public health<sup>[5,6]</sup>.

### Brief history of Chuzhen therapy

The Wudang Mountains (simplified Chinese: 武当山; traditional Chinese: 武當山; pinyin: *Wǔdāng Shān*) consist of a small mountain range in the northwestern part of Hubei, China. They are home to a famous complex of Taoist temples and monasteries. The Wudang Mountains are renowned for the practice of Tai chi and Taoism as the Taoist counterpart to the Shaolin Monastery, which is affiliated with Chinese Chan Buddhism. The Wudang Mountains are one of the 'Four Sacred Mountains of Taoism' in China, an important destination for Taoist pilgrimages<sup>[7]</sup>.

The pestle needle therapy was practised there by a Taoist master named Ruhuan Zhenren (如幻真人) about at least five hundred years ago. The master used to treat poor village people who suffered from various ailments using the pestle needle. A loyal servant of the Taoist master named Li Erfei had served him for thirteen years and had learned about the treatment too. One day, the master called Li and summoned him to depart from the mountain, and descend to the society in order to share the benefit of the treatment to the people at large<sup>[5]</sup>.

Li Erfei had practised it and propagate the therapy method from generation to generation verbally only among his descendants. Until the 15<sup>th</sup> descant of him, named Li Zhongyu (李仲愚)



became a renown acupuncture and qigong expert, and professor at the Chengdu University of TCM. His unique treatment modality using Chuzhen or pestle needle has attracted curiosity among his colleagues. Researches were done under the “75” national scientific priority program and by October 1988 the Chuzhen therapy has been approved by national expert committee. Hence, Chuzhen therapy is an evidence-based modality of therapy<sup>[6]</sup>.

When the author got a chance to study at Chengdu University of TCM in 2008, the Chuzhen therapy has attracted our attention. After consulting with Indonesian naturopath (TCM) association, Chengdu UTCM agreed and despatched Dr. Luo Rong to Jakarta to teach us how to master the knowledge and skill of Chuzhen therapy in a two weeks workshop<sup>[8]</sup>.



Fig. 1. Textbook of Chuzhen therapy published by China TCM Publisher for Higher Education Teaching Materials.



Fig. 2. News about Chuzhen therapy workshop headed by Dr. Luo Rong, and attended by Indonesian ministry of health and Chinese embassy cultural staff. It is published by International Daily dated 26<sup>th</sup> December 2008



### Simple, effective, and easy to master

Pestle Needle Therapy is a non-invasive acupuncture method characterised by a unique set of points, specialised tools and their specific methods of manipulation. Until modern times it has remained a secret method, passed down through a lineage to its modern inheritor, Li Zhong Yu, Professor of Acupuncture at the Chengdu University of Traditional Chinese Medicine<sup>[6]</sup>.

Chuzhen therapy has been proven to be safe and effective<sup>[9-13]</sup>. Its effectiveness has been proven scientifically to be not less than acupuncture and tuina massage. It has been proven to be effective in alleviating various kinds of pains<sup>[9-11]</sup>. Besides, it is also proven to be effective in improving blood circulation in the atherosclerotic brain<sup>[12,13]</sup>.

Its theory and meridians are much more simple than acupuncture. It is a non-invasive treatment, free from puncturing pains, acceptable by all walks of life. The treatment can be done using special tools like short sticks made from metal or wood<sup>[5]</sup>, as shown in figure 3.

To master its basic manipulation technic only needs one to two days of workshop. More time is needed if one wants to be a professional Chuzhen practitioner, as he/ she has to learn the four methods of diagnosis, ie. observation, hearing and smelling, asking questions, and palpation of pulse and area of pains. But for lay people who just wants to use it at home, 1-2 days of training is enough. And keeping contact with the trainer for any questions is recommended.



Fig. 3. Chuzhen on the head, on the back, and chart of meridian and points of Chuzhen therapy.

Due to the many advantages it provide, so it is warmly accepted by the society. Initially the method was adopted by practitioners in TCM, but later on it has attracted other communities including the Moslem community, and the nursing professional communities as well.



Fig. 4. Chuzhen workshop and certification test attended by nursing professionals, year 2020.

The method has been included as a part in the faculty of Dharma medicine in our Nalanda Buddhist College. It is taught in the first semester, so that the students can become a Chuzhen acupressure massotherapist since the first year of study.

The Chuzhen massotherapy is especially useful to alleviate pains, including neck pains due to staring the monitor in static position in a long time leading to straight neck syndrome, low back pain caused by herniated disc, ischialgia or sciatic nerve pain, and so on. Hence it is suitable for many ailments of the modern society. The therapy mainly brings relaxation of muscles and tendons of the problematic area of the body, so that it facilitates the flow of energy, blood and lymph within the meridian and vessels, restoring the supply of blood and energy, as well as the removal of waste products of metabolism from the affected sites<sup>[5,12-13]</sup>. Below is one trial reported in medical journal of the efficacy of Chuzhen in treatment of low back pain<sup>[9]</sup>.

The study was done upon 98 patients with various kinds of pains visiting Chengdu Hospital, China. The Chuzhen therapy was done on the acupoints in area depending upon the location of pain. After one to tow courses of therapy, the effectiveness was 89.3% for epigastric pain; 87.1% for low back pain; 91.3% for headache; 93.8% for menstrual pain. All of the 98 patients showed effectiveness.

## Conclusion

Chuzhen massotherapy is a form of health maintaining and sustaining method originated from Wudang Mountain, China. The philosophical basis is the blended Taoism-Buddhism of balance between Yin and Yang or cold and hot. The method has been scientifically proven safe and effective, so it has spread widely accepted by the society at all backgrounds. We hope to share the useful method for public health empowerment with all parties for the benefit of all beings.



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# **Mentoring: the Utilization of Home Yard as a Place for Trigona, Sp Honeybees Cultivation in Pesagi Village, Tabanan**

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## **ABSTRACT**

Community service entitled: Mentoring "The Utilization of Home Yard as a Place for Trigona, sp Honeybees Cultivation in Pesagi Village, Tabanan". It aims to add the insights of community in terms of utilizing home yards to be more efficient. One of the activities that can be carried out is the cultivation of honey bees, especially Trigona, sp bees. Raising honeybees is not difficult as long as there is a willingness and thoroughness. Trigona, sp honeybees generally comb in wall or tree holes. Beekeeping does not need to provide special food for bees because instinctively, bees will find their own food to areas that have pollen. Pesagi Village is one of villages in Penebel District, Tabanan Regency whose area has the potential to develop honey beekeeping. A fairly large yard and the availability of plants will be able to sustain beekeeping activities. Existing plants have the potential to provide food for bees sustainably. The target group for training/ informing was the existing Subak Abian group "Rencana Karya". From their understanding of gardening, it is not difficult to provide insight about the use of home yard for raising bees. The method used in the implementation of community service activities was training method. The existing Subak Abian group was given training about the potential of the yard, the benefits of raising Trigona, sp bees and the benefits of honey in life. The conclusion of community service is the use of empty space in the yard of the house which can be used for Trigona, sp bee farming, but plants should also be prepared that can produce pollen as food sources for bees. Bees will leave the hive if the availability of food around is reduced and will find more sources of food. In cultivation Trigona, sp bees requires perseverance and patience by considering obstacles so that it can successfully faster. The successful of Trigona, sp bees cultivation is beneficial for the community because it can supplement their income and improve the family economy.

*Keywords: Home yard, Trigona, sp bees cultivation. Subak Abian "Rencana Karya"*





## INTRODUCTION

### Situation Analysis

Pesagi Village is one of the villages in Penebel sub-district, Tabanan Regency at an altitude of 320 masl. It is an agricultural and plantation area with an area of 541 H with an average land ownership of 0.5 to 1 Ha. Total population of Pesagi Village 1921 People spread across 8 Banjar Dinas, namely Banjar Dinas Cangkup, Pesagi, Temukuaya, Kuumkladi, Pegubugan Kauh, Pegubugan Kangin, Munduk Juwet and Banjar Dinas Tegal Seka. Pesagi Village already has a Subak Abian group "Rencana Karya", namely a cocoa and clove plantation group. In terms of education, almost of population has a minimum education level of senior high school so that technology absorption does not get obstacles. From several yards of residents' houses there are colonies of *Trigona* honey bees, sp, which live in crevices of house walls and in holes in rotten trees. The area of the house yard owned per family head averages 0.25 Ha (Anonymous, 2018)[2]. Among the houses there are still empty spaces that can still be used for activities such as the cultivation of honey bees, especially the honey bee *Trigona*, sp.

In Bali, there are 3 types of bees that produce honey, namely *Apis cerana* (honey bees), *Apis dorsata* (wild forest bees) and *Trigona* sp. Bees. (klanceng). *Apis cerana* bees and *Apis dorsata* have almost the same benefits in Balinese medicine. Meanwhile, *Trigona* bees or in Bali are called kele-kele bees which are always sought after and used in various treatments, but the population of bees is difficult to find or cultivate (Wahyudi, 2017)[10].

According to Sihombing (2005)[6], the classification of *Trigona laeviceps* bees is as follows:

Kingdom	: Animalia
Phylum	: Artropoda
Sub Phylum	: Mandibulata
Kelas	: Insecta (Hexapoda)
Ordo	: Hymenoptera
Sub Ordo	: Apocrita
Famili	: Apidae
Sub Famili	: Meliponinae
Genus	: <i>Trigona</i>
Spesies	: <i>Trigona laeviceps</i>



Figure 1: *Trigona laeviceps* bee (Sihombing, 2005)[6].

*Trigona laeviceps* in the local language is called klanceng, lenceng (Javanese), teuweul (Sundanese), kele-kele (Bali) (Perum Perhutani, 1986)[4]. The amount of honey produced is less and more difficult to extract, but the amount of propolis produced is more than other types of bees (Singh, 1962)[7]. *Trigona laeviceps* has a residual sting, but is not used as a defensive tool. These bees will bite their enemies or burn their skins with an alkaline solution. The enemy's vital organs (eyes, nose and ears) will be surrounded by other bees in one colony. This bee is also equipped with an immune system to attack other pests. Honey bee *Trigona laeviceps* is a social insect that lives in groups to form colonies. One of these bee colonies number 300 to 80,000 bees. This type of bee is found living in tropical and subtropical areas, which are found in southern America and South Asia (Free, 1982). Astawa (2018)[1] stated that trigona bee honey is very effective for diarrhea, besides that Ratnayani, et al. (2008)[5] also stated that trigona bee honey is very effective for treating wounds compared to *Apis cerana* honey bee or *Apis dorsata*.

In general, honey is nutritious for producing energy, increasing endurance, and increasing stamina. Many diseases can be cured by consuming honey, including stomach disease, colitis, heart disease, and hypertension. In addition, in honey liquid there is a substance acetyl choline which can accelerate metabolism such as improving blood circulation and lowering blood pressure (Suranto, 2004). Even though it has a low pH, it turns out that honey can increase stomach pH. This is because honey contains alkaline minerals and functions as a buffer. The darker the honey color, the higher the mineral content so that the higher the alkalinity (Wiyana, 2012)[11].

The honey produced by *Trigona* bees is very good for treating gout, heart disease, asthma, and high cholesterol levels. Other diseases that can be treated with honey include lung disease (tuberculosis), eye pain, neurological disease, low blood pressure, liver disease, headaches, impotence, and urinary tract infections. External diseases that can be treated with honey are burns,



chapped lips, mouth sores, and other skin diseases. Honey is also good for consumption by pregnant women, including preventing pregnancy poisoning, increasing endurance, and good for children's growth (Suranto, 2004)[9].

Honey contains many minerals such as sodium, calcium, magnesium, aluminum, iron, phosphorus, and potassium. The vitamins found in honey are thiamin (B1), riboflavin (B2), ascorbic acid (C), pyridoxine (B6), niacin, pantothenic acid, biotin, folic acid, and vitamin K. The important enzymes in honey are diastase, invertase, glucose oxidase, peroxidase, and lipase enzymes. Diastase enzymes are enzymes that convert complex carbohydrates (polysaccharides) into simple carbohydrates (monosaccharides). Invertase enzyme is an enzyme that breaks down sucrose molecules into glucose and fructose. Meanwhile, the oxidase enzyme is an enzyme that helps the oxidation of glucose to peroxide acid. Peroxidase enzymes carry out the process of metabolic oxidation. All of these substances are useful for the body's metabolic processes (Suranto, 2004)[9].

The caloric value in honey is very high 3,280 cal / kg. the caloric value of 1 kg of honey is equivalent to 50 chicken eggs, 5.7 liters of milk, 25 bananas, 40 oranges, 4 kg of potatoes, and 1.68 kg of meat. Honey is high in carbohydrates and low in fat. The sugar content in honey reaches 80% and of the sugar is 85% in the form of fructose and glucose (Wiyana, 2012)[11]. The main acid found in honey is glutamic acid. Meanwhile, the organic acids found in honey are acetic acid, butyric acid, formic, succinic, glycolic, malic, proglutamate, citrate, and pyruvate. In honey there is also the hormone gonadotropin which stimulates the reproductive organs of the queen bee and helps in the egg maturation process.

Formulation of the problem

1. The utilization of the house yard in Pesagi Village has not been optimal
2. Breeding Trigona Honey Bees, sp is not difficult

## **PURPOSE, BENEFITS AND PROBLEM SOLVING**

Purpose

The purpose of the service activity is a change in mindset towards the use of the house yard to a more useful direction. It is hoped that this change in mindset can then be applied towards cultivation, especially the cultivation of Trigona, sp. Honey bees. Suparta, et al. (2009)[8] stated that agricultural extension was intended to change behavior and target motivation so that with his own awareness he wanted to increase his ability in farming (agribusiness).



### **Advantage of Activity**

The expected benefit from community service program activities is that the community can take advantage of the empty spaces in the yard of the house to raise honey bees. Honey bee production can improve the community's economy and honey bees can help pollinate other crops.

### **Solution of the problems**

In order to change the mindset about using the house yard, it is necessary to carry out some kind of outreach activity to the target community. Furthermore, the practice of rearing honey bees from wild to effective boxes is carried out. Provides an explanation of the use of empty spaces that can be used for more useful activities. Explains the honey bee lifestyle, especially Trigona, sp and the techniques of raising honey bees.

### **TARGET AUDIENCE STRATEGY AND OUTPUT**

#### **Target Audience Strategy**

The targets during the community service assistance program were members of the existing Subak Abian group "Rencana Karya" to facilitate the provision of counseling materials. Furthermore, the group is expected to provide information to other people who have not joined the Abian subak group.

#### **Output**

The output of this community service assistance program is at least a national scientific publication

### **IMPLEMENTATION METHOD**

The methods used in community service assistance program activities are counseling and interviews and discussions. The Subak Abian group "Rencana Karya" in Pesagi Village will be gathered at the Wantilan (hall) on Monday, June 22, 2020, which was previously agreed upon. The team brought in experts in the field of beekeeping to provide information on how to cultivate honey bees and how to use the yard for productive activities.



## ASSISTANCE AND CONSTRAINTS ACTIVITIES IMPLEMENTATION

Prepare a bee hive / stuff box as an example



Figure 2 :           Box size P = 35 cm, L = 15 cm,  
H = 15 cm (Community Service, 2020)



Figure 3: Box cover plastic coated  
(Community Service, 2020)





Figure 4: Box with lid.  
(Community Service, 2020)



Figure 5: Sliding Box in and out of bees  
(Community Service, 2020)



## **Mentoring Implementation**

1. Why is it important to use “house yard”? The vacant land around the yard of the house can be used as a flower garden for beauty, the flowers can be used as an ingredient for offerings, flower pollen can be used for honey bee feed. Provide understanding to the community that large yards can be used to raise Trigona bees. Besides being able to increase income, it can also add to the beauty of the yard environment. Honey produced from bees can be sold at a fairly high price. Various ornamental plants can be grown as a source of food for bees.
2. During the Covid-19 Pandemic, as at this time, immunity is needed so that it is not exposed to the Corona-19 virus. One of the efforts is to increase nutritional intake from food. One of the additional food ingredients is Trigona honey. WHY HONEY BEES ??: Honey is easily and quickly absorbed by the body, does not need to be chewed, produces energy, increases stamina, maintains endurance (IMUN). If only each household had an average of two to 4 colonies would be enough to maintain the health of a family. Can treat stomach disease, colitis, heart disease, and hypertension. In Bali there are 3 types of bees that produce honey, namely the Apis cerana bee (ordinary honey bee / Nyawan), the Apis dorsata bee (wild forest bee / Nyawan Dendeng Ai) and the Trigona sp. (klanceng / Kele-kele). Bees Trigona sp. (Klanceng / Kele-kele) not very sensitive to environmental changes, easy to find: walls, bamboo, clove trees, can't sting, just be careful with ears.
3. Provide an explanation of the benefits of honey in addition, honey is easily absorbed because it is a liquid that helps digestive metabolism. Trigona Bee Honey is useful as a drug for gout, heart disease, asthma, and high cholesterol levels, tuberculosis, eye pain, neurological diseases, low blood pressure, liver disease, headaches, impotence, and urinary tract infections, burns, chapped lips. - split, canker sores. Honey is also good for pregnant women to consume to increase endurance, and good for growing children
4. Breeding Trigona bees (Klanceng / Kele-Kele) is easier than Apis cerana (honey bees), Apis dorsata (wild forest bees). Trigona bees do not have a sting like other bees. Trigona honey bees are more expensive than other bees. How to raise Trigona bees / kele-kele nesting in bamboo holes, just move it to a safe place with the bamboo pieces together. For those who live on the Cengkeh stem, by cutting the clove stem then it is moved to a safer place.

## **Obstacles in the field**

1. The mindset of some people is still only on the economic pattern with the hope of how much money they can get from selling honey even though they have not started trying to raise bees.





2. There is still a lack of flower plants planted around people's yards as a source of food for bees so that bees are very far looking for food, this will cause bees to move to distant places.
3. Difficulty moving the queen bee nesting in the wall or inside the tree/ stuff box. Because the queen bee is still in the tree hole.



Figure 6: Failed bee colony removal  
(Community Service, 2020)

## CONCLUSION

1. The use of empty space in the yard can be used for the cultivation of *Trigona*, sp. Bees. However, plants that can produce pollen as a feed ingredient for bees should also be prepared. Bees will leave the nest if the availability of nearby feed decreases and will look for more food sources.
2. In *Trigona* beekeeping, it takes persistence, patience by considering the obstacles so that it can be successful faster. The success of *Trigona*, sp bee cultivation is beneficial for the community because it can increase income and improve the family economy.



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# Performance Art Expression Strategies in the New Normal Life, The Learning Process of the Community in Bali

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## ABSTRACT

The main issue related to the condition of traditional arts during the pandemic is the cessation of old habits that can fulfill the elements of fulfilling the taste needs to become instant. Bali is one of the cultural arts dynasties that lived through the ages. The prolonged pandemic condition has made the totality of art undergo changes. The interesting thing about this incident is how people's behavior interpret changes during a pandemic, and how in the future art can give meaning in social life. This issue departs from written notes that question the virtual world as a new form of art. Has it provided sufficient space for the expression of the actors in conveying their instincts in art processing? This paper is designed to use a qualitative approach, because the problems of social conditions in art are more prevalent in the social community. The theoretical approach used as the analysis is postmodern aesthetic theory which summarizes art forms that have contemporary standards with or without adopting traditional values. The results of this paper are expected to build a new awareness of facing a pandemic, in that situation, people can still enjoy art communication through the new world, the virtual world, while waiting for a change in conditions from new to normal conditions again.

*Keywords ; Strategy, Traditional performing arts, newnormal*

## PRELIMINARY

### 1.1 Background

Art and religion are the hallmarks of Balinese Hindu society, there are many stories that have begun to gain knowledge about Bali, one of which is art. Several writings that have introduced Bali in the past have popularized Bali as a living theater. Walter Spies (German) artist who lives in Bali is considered a fighter in popularizing Bali, inseparable from his inspiration to use his artistic talents to



build networks for newcomers visiting Bali. As a result, Bali has become popular with its arts and culture.

Supported by the traditions and customs of the Balinese people that place rituals as a complement to the concept of Hinduism, the existence of art has a comfortable place to develop. Performing Arts is one of the many arts that is present in Balinese society . The existence of performing arts which is always enjoyed directly fills the space in Balinese Hindu religious activities, giving birth to an artistic culture that moves in harmony. M embangun and fill the spirit of life in accordance with religious concepts understandable to put beauty as a medium of enlightenment.

In the realm of performing arts between performances function as *guardian*, *wewali* and *beb redirects* are the three things that always be the frame for the existence of the performing arts. The function of *guardian* in performing arts has sacred requirements that are recognized by the Hindu community which is believed to be a reflection of the power present in the wali art performer . *Wali* performing arts are not justified in taking the realm of *wali* art because its function is clearly binding to the classical order and its role is to convey Hindu religious concepts with the aesthetic sense of the perpetrator being allowed to flow aesthetically to the actor . Function show *beb divert* merupakan an cents i show that pure expression enabled to entertain and also profane.

In normal times where meetings and activities are not limited, all performing arts activities can be enjoyed with full two-way communication. This does not only provide exploration of the expressions of art actors and society as connoisseurs of being able to fill their taste needs and art actors to feel proud of sharing their abilities. For performers air bag i guess and make the audience become home to a wide range of fluctuation is a victory. Making connoisseurs with various skills is a mutually beneficial necessity.

The condition of the newnormal era is a term used for a new order in the recovery period due to the impact of the corona pandemic . It all started last year to be precise in March 2020, when the Balinese people celebrated Nyepi . The mass media began to busy reporting the existence of a massive, highly contagious new virus case that started in China (Huan). Two months after the virus broke out the whole country was becoming very cautious. The migrant workers who had enjoyed their work so much were then sent home. Very busy tourism suddenly died due to the spread of the virus which was increasingly rampant. The Indonesian government itself took steps to limit joint activities . Suddenly all the tourism sectors were confused and stopped their



activities. Masyarakat Bali which is largely dependent on tourism world into confusion and helped sunk by the state .

The tourism sector is the gold of Balinese society, in the end people have to accept the fact that there are many new unemployed who no longer have jobs. This situation is getting stronger every day and has an impact on limiting social activities. Community activities in Bali have become irregular. Joint activities are prohibited, including carrying out religious ceremonies which are strictly limited. The thing that sparked and received the consequences of the Covid pandemic situation was the art of showing . All activities that carry a lot of potential to spread the virus are being controlled, at the expense of social activities. Finally, the government issued the term *newnormal era* . The term is more or less interpreted as a form of new order behavior that follows health protocols.

The pandemic condition that is increasingly rampant has not only cut off the world of tourism, but the artistic traditions involved in the activities of indigenous peoples in Bali have also experienced an unfavorable impact. The show is no longer able to peddle exotic aesthetic values and carry out old habits. There are many problems that arise when the conditions of the New Normal are imposed. People couldn't go out at night, hang out, let alone enjoy a show. This condition is not only stifling for the performers of the arts but also for other communities including Hindus who live with an unsettled heart, there are many complaints but no satisfactory answer. How to respond to the conditions of the newnormal era in performing arts to be interesting, the first reason art is a medium to revive the inner atmosphere so that the excitement of life can be passed normally. board a n second, performers as a subject in art requires a medium for expression can exist in meeting the work. The three pandemics are not a breaker of activities, but a pandemic is one of the conditions that must be learned. Fourth, through this paper, it is hoped that strategies in dealing with pandemic conditions can be better understood and addressed wisely so that performing arts can have space so that the goal of returning to life is full of color and joy can be restored more quickly.

## **B. Methods and theoretical studies**

This article is based on the reality experienced by artists when the corona pandemic hit the world. There is one fundamental difference that breaks the behavior of the general public in responding to the existing pandemic conditions. Some of these habits are avoiding crowds, while the basis for traditional performing arts in Bali is generally a crowd that is conditioned in an open space or space. The characteristic of social gatherings in performing arts, let alone traditional performances, is that crowds cannot be avoided. The power of the government in protecting its citizens is something



that cannot be ignored so that various regulatory products are felt to have closed the opportunity for performing arts to carry out their normal activities.

In theory of primitive art, as expressed by the philosopher of art Plato, Socrates, including Aristotle, reveals that primitive arts strongly support works of art based on natural forces outside the human body. Putting beauty on natural objects and away from human power as the determining subject of beauty. The beauties that are in awe of nature try to take away the freedom of human expression as the determining subject of beauty. *Mimesis* is a term that arises because this *genre* tries to imitate real facts in the form of works of art. It is very obvious and easily captured in the works of art actors and also digital works. Then another characteristic of primitive art is the effort to present sacred values in works of art that clearly follow this art genre. The appearance of various god figures who are used as icons in artwork knitting various characters and powers that accompany the icon or symbol in question so that humans as actors of art have absolutely no match to juxtapose themselves with the existing symbolic powers.

In primitive art, Bali is indeed ranks to this day popular adopt ritual materials in artwork. The concept of literary works that have very deep life values becomes dominant in influencing art actors in their work. Ritual activities in the Balinese Hindu concept are very open to elaborating sacred concepts in the form of works of art. A work of art that has very thick primitive characteristics. One of the so-called primitive arts in Bali is like the Barong Brutuk art tradition in Trunyan Bali Village, one of the old villages in Kintamani sub-district, Batur, Bangli district.

Besides that, the emergence of primitive artworks also presents masks that represent animals that are considered to have powers related to sacred values, such as barongs (bears), tigers, pigs and others as a form of representation of natural forces. All are based on the mintos of ancient societies which are still practiced to this day. In rural communities in Bali, events in the global era such as today all these primitive characteristics are still carried out in a more grandiose manner.

Apart from primitive aesthetics, it turns out that the beauty that develops in theoretical conceptals also begins to experience various dilemma issues that begin to doubt the beauty of nature as the main form of presentation in terms of beauty. Present the aesthetic style or the beauty of modern art. placing the power of the doer of art as subjective in beauty. This emerges a new form of consciousness that places beauty in the artist as a source of beauty. The characteristics of modern art are very much dominated by art products that are present in an environment full of rules. The freedom that places expression on the filling strength of different mediums and materials on regularity in the artwork becomes the standard for the quality of the work. This is accepted as a form of challenge that





must be defeated by every modern art actor so that he is able to present aesthetic works that can be used as a standard to measure the peak of beauty (which is animate or in Bali known as Taksu). Examples in traditional arts in Bali that lead to modern art can be seen in the traditional performing arts, legong performance art<sup>[11]</sup>, k ekuatan aesthetic that is placed on the ability of artists to imitate the techniques and then make a clone as a base material for the work of making new things. Such a process at least has interpreted the presence of art actors as the heir to strong traditions but also has the opportunity to participate in expressing art in the cross of novelty.

Expression and strict regularity really dominate the works of art that appear even in Bali in performing arts, the characteristics of modernization in aesthetics are very influential. Dignity, honor and identity as standard forms of aesthetic measurement for artists are the highest values for the designation of high culture. The term high appears as a form of quality that always pays attention to existing cultural roots as a form of development that is never abandoned.

It seems that the presence of several major artists who also often receive trips abroad, such as Made Bandem, Wayan Dibia, and several other colleagues who are often invited to exchange experiences have had a lot of influence so that they have begun to gradually change the paradigm of modern works towards works that are more expressive. Sometimes apart from the old habits that idolized the order and guidance in traditional arts, they began to dare to break out of the binding grip. Introducing contemporary concepts in formal art institutions makes art actors in the academic environment start to not only engage in modern arts and try to appreciate them. Even though it has been a long time since the public has observed the oddities in artworks, in the end postmodern aesthetics, which is characterized by a limited time space with change as an eternal thing, has resulted in militant community groups who have become defenders of postmodern aesthetic ideas. The three aesthetic forms that are present in the life of people in Bali are present in strong social nuances. Do not rely on digital technology as a reliable force to gain the popularity of artworks. In the end, technology becomes a very promising space as a foundation to seize the privacy space of the people who often lack time to enjoy the real world of reality.

### **C. Historical study**

The issue in this study is the journey of cultural events which is a routine activity for the government in advancing regional culture as a support for tourism culture. Before the pandemic occurred, several cultural advancement activities including traditional arts in Indonesia were worked on through art activities. There are various formal activities held by the government in relation to





development in the performing arts sector. The activity is carried out through an art festival at the Porseni village level, at the sub-district level, the selection of the performing arts ambassador for the regency level. and in the regency, performing arts activities are carried out within the framework of fostering and consolidating provincial ambassadors. At the provincial level, an activity called PKB is presented. At the national level it is filled by the province through the cultural office to participate in the national level performing arts festival.

Activities at the village level raise the potential of performing arts that live in their daily lives through functional control networks that have been systematically formed. The role of society in reviving the conditions and situations of life is carried out by cooperating with religious cultural activities. The concept is philosophically taken from the needs of religious actors who view that mood greatly determines the behavior of religious actors in strengthening beliefs about their beliefs. It has a lot to do with taste. Peace can only begin when from controlled sincerity in virtue, beauty and ends with satisfaction can be realized. The manifestation of sincerity will be shown in various forms of submission through knowledge and skills. Managed performing arts in rural unify the concept of the knowledge and skills that in the performing arts so that various forms of art primitive, modern get a good place in the life of religious activity. Likewise, in its capacity as a profane art that was born from postmo art, it has received support from the tourism culture. The tourism culture is very close to the postmodern performing arts.

Under normal conditions all activities for the promotion of culture have developed, especially those carried out by the provincial cultural office, giving birth to various forms of development and preservation. S fter Party Bali Arts, was born , Bali Mandara maha lango, Bali Mandara mahanatya, Bali jani, Moon languages . a series of performing arts activities provided by the provincial government in an effort to promote culture.

The Bali Arts Festival that emerged in 1978 was a breakthrough for the Balinese provincial cultural service with the center trying to make culture the center of development based on culture . The emergence of another program that gave birth to Bali Mandara Mahalago is a series of performing arts expression activities intended for studios and academic groups. Then, to accommodate the expression of traditional performing arts and its development, the Bali Mandara Maha Natya program was born, which was centered as a medium for the development of traditional arts that had declined. S e continued born program performing arts *Bali J ani* accommodate young people yearning expression in acting on the results of the freedom of work without adan yes bulkhead and grip that pitch system must be followed. The last is the month of language optimizing works, but



due to the prolonged pandemic, the packaging of the performing arts is directed towards virtual art as an art form that has started to pop recently.

#### **D. Discussion**

The problem that refers to the importance of strategy in the enjoyment of art is how can the enjoyment of art be able to meet the standard of satisfaction in fulfilling the aesthetic value for connoisseurs and actors of traditional arts in society during a pandemic. The prolonged situation in the social life of the community makes all actors of art and society as connoisseurs experience adaptations to conditions in which everyone inevitably is forced to face conditions that cannot be denied. The unavoidable reality where social activities and activities are completely unable to be presented in the reality space produces what is called an imaginative world. Just as the philosopher Piliang had imagined with a note of his opinion about the folded world. In his theory, it is stated that the world will lose its reality and will be replaced by a virtual world that is able to be as close to everyone as possible.

The presence of the digital world is the end of the world of reality where the reality that has emerged has swallowed up social life which is often enjoyed as a form of normal life activities. Especially for Balinese people who are very consumptive in carrying out social life, which is wrapped in various symbols of belief. As a result, what was presented as ritual completeness in the traditional life of the Balinese people was erased by the pandemic which has yet to come to an end. This condition makes everyone learn not to break existing habits in various ways.

One of the activities that is also affected is the performing arts. Almost the problem is the loss of the medium which is considered a systemized network. The first is the actor, the second is the work of art, the third is the audience, the fourth is space. For art actors, what is not enjoyed is direct touch when they express themselves. This gives an aura like Sutrisno's expression in Cultural Theory (2005; 34). In his study, he wrote that the sacred thing in work does not occur in the reproduction of art objects, quoting Walter Benjamin's expression. The same is true during this pandemic. Perhaps the possibility that can be learned is to get used to enjoying the process of work as a pleasure and holiness in works of art. One thing that remains in a pandemic condition is a wider space gap that even penetrates the increasingly real world of privacy. Although that has eliminated the occurrence of direct communication. The loss of communication between art actors and connoisseurs as a form of strengthening and imaging processes, of course, only switches to a written commentary. Because the work is also present in the folded room. Performing art works that often appear in cyberspace can no longer be shown in the realm of reality because real space is prohibited



by strict regulations to save conditions from a pandemic. especially for connoisseurs who are accustomed to real touch will miss many opportunities to find self-satisfaction because there is a different taste that will complement the situation of artistic life. Space as a form of implementation of work displays that can be enjoyed both video and audio is no longer equipped with real objects because everything has been absorbed by the digital world so that the aesthetic strength will then be very beautiful when the completeness and quality of the material is supported by the sophistication of the world of audio and video. Performing arts may no longer be able to stand alone without being equipped by the world of recording as is the case with works of art that are recorded on video. The real reality is not expected but the only one that gives hope.

### **E. Closing**

A strategy that should be contemplated is that satisfaction as a form of trigger in work should not be taken into account entirely in aesthetics, because works are objects that must be presented so that works of art can interpret human life activities. Maybe in terms of space and time the quality will depend on the results of the absorption into a file bag that can only be translated by digital tools. However, it is not entirely inferior because good support and techniques in the presentation of the tapes will probably help a lot. Even the work of art will last and be easier to enjoy. Financially, a strategy and understanding is needed so that the work is able to have an economic impact. This is what deserves more attention. Thus there will be a shift in conditions and situations during this pandemic as a form of difference that becomes enrichment in work. The important thing that needs to be completed is to master digital technology as a vehicle for playing in order to be able to support and carry out the created artwork.

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[1] The art of legong is a creative work of Balinese dances that emerged when the legong gamelan music began to rise, which is thought to have originated from sacred dances such as sanghyang dedari.



# Production of Eco Enzymes From Fruits Peel and Vegetable Wastes to Maintain Public Health During the New Era.

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## ABSTRACT

Most of the waste problems that come from household waste are from fruits peel and vegetable wastes, if managed properly can be a resource. Eco Enzyme is a complex solution produced by the fermentation of fruit peel and vegetable wastes, brown sugar or molasses and water for 3 months. This fermentation creates a vinegar-like liquid with natural proteins, mineral salts and enzymes that make it magnificently multipurpose in and out of the home. Use of Eco Enzyme is emerging as an effective method we call Enzyme Cleaner such as mouthwash, facial cleanser, floor cleaner, hand wash, etc to maintain public health during the covid pandemic. The reaction of eco enzymes because of citric acid, acid amino in fruit dreg and the chemical conversion turn carbohydrates, fats and proteins into carbon dioxide and water to generate a form of usable energy. Besides that, the function of the acid is to biodegrade the carbohydrates, fats and proteins (National Institute of General Medical Sciences, 2007) . Eco Enzymes used in wastewater belong to the category of biological additives. It is a complex organic substance of protein chains and mineral salts and juvenile hormones. The functions of Eco Enzyme is to resolve (decompose), transform (change), compose (combine) the catalysis. The enzyme converts ammonia to nitrate (NO<sub>3</sub>-), a natural and useful hormone and nutrient for plants (Ways to Save Energy, 2008).

*Keywords: Enzyme Cleaner, fresh fruit and vegetable peel, public health*

## Introduction

Corona Virus Disease 2019 (Covid-19) has spread to various regions in Indonesia including in Pekanbaru. According to the Head of Service Riau Province Health, Mimi Yuliani Nazir, on March 18, 2020, 1 positive patient has been detected Covid-19 in Riau. The patient lives in Pekanbaru and



has been in care at the Regional General Hospital Riau Province Arifin Ahmad, Pekanbaru on March 13, 2020 [1] [2]. After the case these, a few days later happened the expected significant increase in society number infected Covid-19 in Pekanbaru. Among them, on March 20, 2020, there were 46 people under surveillance (ODP) and 14 Patients under surveillance (PDP), including 1 positive patient Covid-19. Next day next March 21, 2020 occurred an increase in the number of ODP by 84.8 percent of 46 to 85 people, while the number of PDP increased from 14 to 16 people. Based on conditions that are considered emergency, then on March 22, 2020, Mayor of Pekanbaru, Firdaus set the status of the City to be Emergency Response Pekanbaru Covid-19 [3] [4].

Maitreyawira Buddhist College (MBC) in Pekanbaru was founded in Jakarta in 2008, until now it has been running for about 10 years in Jakarta, with 433 students who have graduated. Starting in 2018, the operation was moved to Pekanbaru based on the Decree of the Trustees of the Cipta Kader Maitri Foundation dated September 3, 2017. Starting May 2018, the operations of MBC moved operations at the Bumi Suci Maitreya Education and Training Center / Maha Vihara Maitreya Jln. Bukit Barisan III Riau Ujung, Pekanbaru. This Bumi Suci Maitreya was chosen as the MBC because of its adequate capacity and easy reach from various places, its human resources are also very supportive.

Producing Eco Enzyme into useful materials for Maitreyawira Buddhist College (MBC) in Pekanbaru for both health and hygiene are carried out based on the Community Service program in 2020, until the results of their work, we concluded that with the presence of training resource persons for making Eco Enzyme with the use of fruits peel and vegetable wastes was quite helpful for lecturer and university student MBC in Pekanbaru. By utilizing fruits peel and vegetable wastes which was usually useful as a substitute for industrial chemical products. Not only for environment, fruits peel and vegetable wastes could create economic value for lecturer and university student MBC in Pekanbaru because besides being clean the environment also did not require expensive costs to obtain it. By introducing eco enzyme fruits peel and vegetable wastes management.

This community service aims to educate the lecturer and university student about using an eco enzyme from fruits peel and vegetable wastes to maintain public health during in the new era as enzyme cleanner. Implementing community service that is carried out is training and practice of making eco enzyme and its benefits, direct practice of demonstration by utilizing eco enzyme as enzyme cleanner. The results are training and mentoring in making eco enzyme based on fruits peel and vegetable wastes, training and hands-on practice on applying eco enzyme in the MBC as enzyme



clanner by utilizing eco enzyme produced as disinfectant, mouthwash, facial cleanser, floor cleaner, hand wash, etc to maintain for lecturer and university student's health during the covid-19

In anticipation of the spread of the Covid-19 virus, an eco enzyme is believed to kill harmful viruses in the air. An eco enzyme's advantage is that it is environmentally friendly and does not harm the body [5], following the WHO's warning that spraying chemical disinfectants on the body's surface cannot kill viruses that have entered the body. This action is dangerous because the content of chlorine, alcohol, and hydrogen peroxide can be dangerous if it comes in contact with the skin. Thus, the solution is that people use eco enzyme solutions as a substitute for chemical disinfectants.

Based on the analysis of the situation, several of MBC's problems in preventing the spread of Covid-19 and increasing fruit peel and vegetables waste production are the availability of disinfectant liquid which is increasingly rare and expensive on the market.

Based on the analysis of the situation and problems of the MBC, the priority matters to be addressed include the manufacture and use of eco enzyme as an environmentally friendly disinfectant to prevent the spread of Covid-19. It should briefly explain the background of the study and research objectives, provide a short review of the pertinent literature, state the originality of the research, and state the research objectives. This section also covers the real and actual problems, challenges, or requirements needed by the community-related to the research purposes.

## **2. Method**

Based on MBC's problems, empowerment efforts that can be done are producing eco enzyme based on fruit peel and vegetables waste as a disinfectant in preventing the spread of Covid-19. considering the eco enzyme is a product that is safe to use, environmentally friendly. Utilization of based eco enzyme as disinfectant and enzyme cleanser is expected to solve partner problems in preventing the spread of Covid-19, which is very dangerous. Liquid organic disinfectants produced from eco-enzyme based on fruits peel and vegetable wastes can also The approach method that will be carried out to support community service programs' realization to partners is participatory empowerment, which includes lectures and discussions (training), mentoring, monitoring evaluation, and assistance with materials and tools. The method used in this program is in the form of :

### **2. a. Workshop and training**

Materials for lectures were socialization to partners about Eco enzyme: characteristics, benefits, advantages, manufacturing methods, and application methods as a disinfectant. Eco-enzymes is a complex dark brown colour solution produced by fermentation of fruits feels dan vegetable





wastes. It has strong sweet and sour fermented scent due to citrus fruit peels and vegetable wastes. Eco enzyme produced using fruits feels and vegetable waste, a ratio 1:3:10 [6], example 50 g of molasses (brown sugar); 150 g fruits feels and vegetable wastes; consist of 500 ml of water.

Tools used for example: plastic container 600 ml.

How to make eco enzyme :

1. Prepare a used plastic container 600 ml. Do not use metal containers ad they are less elastic. The fermentation process will produce gas, so it requires a clean container.
2. Put 500 ml of water into a plastic container, followed by 50 g of molasses.
3. Put the remaining fruits peels and vegetable wastes 150 g into the container.

Please leave it in the room from the fermentation process. Do not fill the container full. Stir or turn your plastic container upside down until the water and sugar/molasses solution is mixed well. Please don't shake it. In the first month, gas will be produced from the fermentation process. Stir the plastic container upside down, unscrewing the plastic container every day for the first month. Sometimes there is a white coating on the surface of the solution. If worms appear, add a handful of sugar/molasses, mix well and then cover. Store in a cool, dry, and ventilated place. Avoid direct sunlight and do not store it in the refrigerator. Fermentation lasts for three months (for tropical areas) and six months (for subtropical regions).

After three months, filter the eco enzyme using a strainer. The residue can be reused for a new batch of eco enzyme production by adding fresh bins. The residue can also be dried, then blended, and buried in the soil as the fertilizer or disinfectant. Utilization and application of eco enzyme as a disinfectant and enzyme cleaner. The reason why the fermentation process of fruit or vegetable waste is very long, about 3 months, is because there is a very small amount of yeast found in the waste to carry out the fermentation. In this case, the enzyme concentration of the yeast is limiting. Therefore, adding more yeast will speed up the fermentation rate, shortening the fermentation process [7]. The fermentation mixture can be filtered after 3 months to obtain a brownish yellow enzyme solution.

The community service team also provided assistance in the direct practice of making eco enzyme based on fruits peel and vegetable wastes and its use and application in the surrounding environment as a disinfectant to prevent the spread of the Covid-19 outbreak and also act as enzyme cleanner. Because it is still in the Covid-19 pandemic condition, which



requires social and physical distancing, the lecture and discussion meetings (training) refer to the Government's procedures. The forum is not more than 15 people.

2. b. Direct practice:

- Making eco enzyme as a disinfectant and enzyme cleaner

This community service activity requires active participation from both parties. MBC plays an active role in empowering partners by carrying out transferring technology from MBC to partners. Likewise, lecturer and university student play an active role in implementing community service in providing a place for training locations. Sites for making disinfectants and enzyme cleaner from eco enzymes that are expected to play a role in preventing the very dangerous spread of Covid-19.

### 3. Result and Discussion

Activities that have been carried out in this community service program are:

- Preparation phase

Hold team discussions about training plans and training materials to be provided.

- Implementation Stage

At this stage, training is carried out in the following order of events:

Making eco enzyme based on fruits peel and vegetable wastes.



**Figure 1.** Training in making an eco enzyme

- Utilization and application of eco enzyme as a disinfectant.

As a disinfectant, eco enzyme can replace most cleaning liquids for multiple household products, even to purify air from airborne bacteria, due to its ability to kill bacteria and fungus. Other than to



reduce the usage of chemical based cleaning liquids, eco enzyme also has its own economic value because it reduces the expense from buying commercial cleaning products [8]. Enzyme activities inside an eco enzyme can also be utilized. During a fermentation process, the enzymes of microorganisms are active to process the energy source. Eco enzyme is one way that can be used as an organic waste-based disinfectant to prevent the spread of the Covid-19 virus. Eco enzyme is a fermented liquid from organic waste of fruits, vegetables and vegetable wastes which has many benefits [9] [10] [11]. The benefits of eco enzymes are divided for health (as a disinfectant, cleaning fluid), for households (as a substitute for bath soap, floor cleaner, mouthwash) [12] [13]. That eco enzyme contains amylase, protease and lipase activity that can be utilized to treat dairy waste, in which it contains carbohydrate, protein and fat to be broken down by those enzymes [14].

- Utilization and application of eco enzyme as an enzyme cleaner.



**Figure 2** Eco Enzyme for enzyme cleaner (before and after use eco enzyme for clean the face from acne)

#### 4. Conclusion

Lecturer and university student who are members of the MBC are very enthusiastic and can understand the training and hands-on practice of making eco enzyme. One way to protect the environment because eco enzyme proven to be environmentally friendly.

A critical need of the present day for reliable and eco-friendly is fulfilled by Eco-Enzyme. In the present review endeavour was made to explore distinctive uses of Eco-Enzyme by estimation of various chemical compounds in it. Based on the analysis of the situation and problems of the lecturer and university student, the priority matters to be addressed include the manufacture and use of eco enzyme as an environmentally friendly disinfectant to prevent the spread of Covid-19.



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# Humanity Dimension In Hindu Yadnya

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## ABSTRACT

As a revealed religion that is most perfect and transcends the times, Hinduism is very rich in ideal concepts. It's just that because of the influence of the times, many Hindu concepts that have ideal values are bounced off by various kinds of situations, demands and challenges of circumstances and especially human egoism. What according to the ideal concept is good and useful for the glory of human life, is often ignored and even forgotten. Among them is the matter of Yadnya, which until now has narrowed its meaning to become as if it were only a matter of ritual offerings. In fact, in the religious practice of Hindus referring to the Basic Framework of Hinduism it also seems to prioritize the ritual part of the ritual rather than favoring *Susila* (ethics), especially regarding the understanding of *Tattwa* (philosophy). This article intends to explain that in fact in the Yadnya ceremony, there are dimensions of human values that are very important to be implemented into the real life of Hindus.

*Keywords: humanity, yadnya, Hinduism*

## INTRODUCTION

Examining the meaning of *Yadnya*, it can actually be expanded. In addition to the usual meaning as ritual offerings (*sesaji*), at least there are several extensions of the meaning of *Yadnya* that can be carried out in an integrated manner, namely: (1) *Yadnya* in the sense of self-control to remain firm in carrying out *dharma*; (2) *Yadnya* in the meaning of respect, such as respecting parents (elders), other people, leaders, holy people, holy places, sacred symbols, and so on; (3) *Yadnya* in the sense of service / devotion (*sewa*) to people who need attention or help; and (4) *Yadnya* in the form of sacrifices in the form of property (material), energy, thoughts, facilities, or opportunities to help others who are in need of a helping hand (Widana, 2016: 67).





When Hindus are so totally sacrificing in their *Yadnya* affairs in the form of ritual offerings (sesaji) that are vertically oriented (*niskala*), they should also embody them horizontally (*sakala*) in the form of the implementation of human values based on love. This is done, first of all by strengthening the view that every creation of God, especially humans, is a child of God himself, as the Hindu philosopher Svami Vivekananda firmly stated:

“See every human being, man, woman and child as God. You will not be able to help anyone, you can only serve them. Serve children of God, serve God Himself, if you have the honor to do so. Do it as a form of worship” (Yogamurti, 1982: 11).

Swami Vivekananda's testimony above cannot be separated from the realization of the teaching of *wasudewa kuthum bhakam*, that all God's creations are one, the same, therefore they are all brothers and sisters as children of God. So that serving them all is the same as serving God (*manawa sewa, madhawa sewa*). Those souls that are of service can only grow from the seeds of love which are sown and then planted in the conscience of every human being. Love is a symbol of sincerity, while love is a melt of intimacy, everything flows sincerely without strings attached. William Shakespeare added, "If a person does not receive and give love, he will remain alone, his soul is barren, and a psychic death awaits him" (Samuel, 1987: 84).

## DISCUSSION

The life cycle of creatures continues to live, move, circle through the axis of dependency evolution. God creates, creatures enjoy. Nature gives, creatures receives. Nature has wisely perpetuated the power process of giving, giving life, giving life and anchoring an immortal nature lesson about the power of giving. However, it seems that the role model of giving is still not fully part of the attitudes and behavior of everyday life. Perhaps, it is still felt as something that is very difficult to do. Not a few people prefer to put themselves in the position of “given” rather than "giving". Because when “given” there is revenue, income or profit, it is considered more profitable. Meanwhile, when "giving", there is only spending, which is the same as reducing, and of course it is considered detrimental. This view has become a phenomenon, and certainly rests only on material calculations: loss-gain or gain-loss.

In fact, said *Svami Vivekananda* warned: “Don't ask for something, don't want a reply. Give what you have to give; it will come back to you, but do not think about it now. He will come back a thousand times more, but you must not pay attention to the result. What is important, have the strength





to give; give, and finish up here” (Yogamurti, 19892: 110). Referring to the holy book *Bhagawadgita*, II. 47, clearly states; "Only doing for your obligations, not the result of that action (what you think), never reward being your motive for working, don't be silent" (Pudja, 1981: 56).

The fact shows, even though nature has immortalized an example of the power of giving, it is not enough to be able to make people in it move and then do the same, give and always want to give. It is realized that human life and life are actually intertwined with one another in natural and eternal dependence. Through the process of life, the habit of giving and or helping others should continue to be nurtured so that it becomes a strong part of the formation of a virtuous human personality. Instill a caring attitude towards others seems important to be internalized in order to raise awareness of human nature as a social being. That life and human life which are interdependent should not just position ourselves as the recipient, not the giver.

### **1. *Tat Twam Asi*: Commitment to Humanity**

It is a natural role played by humans to develop their own existence in the social relations of humanity. Humans and other humans live and exist bound by dependency. One another is engaged in the crystallization of humanitarian institutions. The notion of humanity as a humanities concept is summarized in it, by laying the foundation "together in equality" as a universal projection in viewing human values with a just and civilized human spirit. The teachings of *Tat Twam Asi*, as a characteristic of religious socialistic human beings, provide philosophical guidance and an ethical foundation, that above love is service to fellow children of God. *Tat Twam Asi*, at the same time is a reflection of the religious attitude of faith by placing service to God's children, brothers in God, as a manifestation of worship before God. *Tat Twam Asi*, with its human dimension is an ideal form of morality, with the spirit of "*sarwam khalu idham brahman*" that all creation comes from His power alone, and therefore 'we' are brothers, one family in the exclamation of all worlds (*sarwam idham kuthem bhukem*) (Segara and Sutrisno, 2018: 277).

Mukerjee (1990: 79) defines that humanity in the meaning of humanism is, "an integrative system of human meaning, goals, values and harmonious programs carried out by humans in realizing their ideals, both individually and collectively in the collegial estuary." From here, humans are then obliged to take an attitude in their noble role as virtuous beings, with morals to always be determined to uphold human values consciously and persuasively through psychological understanding on the basis of faith. Its essence is essential for efforts to provide meaning and noble values in the



embodiment of *Tat Twam Asi* teachings as a moral force to realize the dimensions of human values with everyday language in concrete loving behavior.

Human life and life have indeed been woven together in a relationship. One another, depending on each other's hopes and dreams, including the desire to share feelings in the joys and sorrows of siblings (*suka-duka manyama braya*). Humans always hope to find joy, but they cannot be separated from their position. But with the spirit of brotherhood, all problems of life can be resolved on the basis of social solidarity.

## **2. Social Loyalty**

Humans are basically individual beings. However, his social nature makes humans helpless to live in solitude. Their individual existence actually sags and then dissolves into social institutions, that humans cannot be alone without the presence of other humans in togetherness. Even then, in a meaningful sense, humans are only said to be human when they are able to condition themselves in the midst of being with their fellowmen. This mechanism of social nature then manifests the forms of linkage in dependency ties through the form of association. That man, no matter how hard his ego feels, certainly does not want to isolate himself from the social sphere.

Even humans absolutely must always strive to develop their natural socialistic image as a human being in civilization. In this sense, what is called togetherness should become a standard value in creating kinship conditions imbued with the spirit of "humanizing human beings". The key word social generosity is becoming so important and it is clear that it must be institutionalized so that it can flow the flow of human relations which has recently been colored by the symptoms of competition. The human desire to overcome competition in the struggle for life, as if to keep on chasing, the lust of egoism is increasingly agitating against each competitor by humiliating and putting aside the foothold of social solidarity. Under these circumstances, the impression is captured that humans have damaged the image of socialistic nature, as real people, they are obliged to mutually humanize human beings with human souls in an atmosphere of humanitarian kinship.

Indeed, there is no prohibition for everyone to become wealthy, but the use of assets obtained through hard and lawful work must be controlled to avoid gaps or social jealousy. The holy book *Sarasamuscaya*, 226 states; "And it is not permissible to just enjoy something pleasant, such as tasting delicious and refreshing food, it is not permissible to decide something to do alone, let it be negotiated with other people, and do not go alone, and it is not good to wake up alone while all friends -friends are still sleeping" (Pudja, 1981: 104).



It is quite clear, that in solitude enjoying wealth, while other people are still lacking even almost without possessions; in solitude flaunts wealth, while others are still helpless; in solitude wading through the realm of luxury, while others remain weak and breathless, is a manifestation of greed that is completely irrelevant in justifying the commitment of social solidarity based on human values.

### 3. Social Solidarity

"I just became me because of you" Martin Buber philosophized. The implicit gesture of such an opinion reminds every human being, that humans can "humanize" if they can very strongly carry out their nature as creatures who feel they need friends. That humans can only "survive" if they are closely tied to their relatives to jointly seek and / or get land for livelihoods.

After all, the essence of man as a human being is that there is equality in dignity, which cannot be blasphemed or even betrayed. In essence, all humans are the same, and all human beings are brothers and sisters. The philosopher S, Radha Krishna confirmed it by stating that "*All children with brothers should not be one human being who feels alien to another. Therefore, the happiness of all humans should be our goal*". What is mandated in the letter of the meaning of the verse Santiparwa, 109.10 further strengthens the determination, that "*everything that aims to provide welfare and maintain all, that is called dharma, and everything that brings tranquility (to beings) is the true dharma of religion*" (Punyatmadja, 1989 : 14).

It is quite understandable how the tasks of humanity have become the dominant stimulating element, moving the hearts of every human being to coexist in a natural order in order to support one another. This denial of nature is actually the same as "suicide". However, that only sounds in the philosophical conception. Whereas in the realities of everyday life, people are increasingly inclined to live alone, maintaining the existence of personal authority. So that when connected with the so-called solidarity of life, it feels no more like a faint wind which is getting fainter and fainter. It is still not enough to inspire the souls of social solidarity.

Ability is there, but because they never feel sufficient, so the notion of social solidarity appears only as ideal values which seem not so reliable in context. Between *dass sollen* and *das sein* (ideal form with real form seems unbridgeable. In reality, the breath of social solidarity, which is actually a characteristic of life, will still be bumped into by the nature of human selfishness that never fades. It is recognized or not some around us more in favor of the desire for the satisfaction of self-interest,



(*nresamsia*). This indication has even been cited in the book "Megatrends 2000", where one in ten tendencies, states that the individual will be victorious, whose symptoms are very easy to observe. Its manifestation can often be felt, everyone act on the basis of their respective self-interests.

Solidarity is a kind of breath of togetherness, where one another can breathe in each other, reap life without being tainted by the act of man himself to tarnish it. Social solidarity only wants everything to be shared, feel sincere and satisfied. Social solidarity as a sign of letting go with a sincere feeling of ambition satisfies self-interest. Social solidarity should be used as a fire to ignite brotherhood in friendship which does not require much demanding but is more eager to give and continues to give (Wegig, 1986: 61).

#### **4. The present *Yadnya* is the *Yadnya* of humanity**

Then how should the essence of *Yadnya* be implemented in the contemporary context? In the contemporary context which is often equated with the Kali (Kaliyuga) era, the *Slokantara* text - 81 (65) clearly implies that: "if in the *Kerta (Kretayuga)* era, *tapa brata* takes precedence, in the *Treta (Tretayuga)* era, knowledge which was favored, then during the Dwapara era (Dwaparayuga) the sacrificial ceremony (the *Yadnya* ritual) was highlighted, so when it was in the times of Kali (*Kaliyuga*) only funds (property) were put forward "(Sudharta, 1982: 128).

For what, none other than realizing the *Tat Twam Asi* concept, implementing the teachings of love by awakening the power of giving. This means that through funds (material property / wealth) that is owned it can be offered as a tangible form of the present *Yadnya*. So that *Yadnya* is not always in the form of offerings (*upakara bebanten*), but rather in an effort to realize devotion through sacrificial forms as devotion or service (*sewa*) to fellow human beings.

Nor are they merely vertical (in His presence), but especially those related to horizontal interests, which are beneficial for efforts to "humanize human beings". Because the wise say, our devotion to God can be manifested in the form of service to fellow humans, with all its activities, such as helping poor families, donating to improve the quality of education, helping the sick, empowering Hindu human resources, including improving the people's economy, and the like.

From a conceptual perspective, Hinduism cannot be doubted anymore, except that it must be firmly believed in the truth in its perfection. Hinduism does not strictly require its followers to memorize various conceptions, whether they are theology or philosophy. or the application. Hinduism is more concerned with implementation in the form of practice (*karma*), not just knowledge (*Jnana*) or rote theory. Because a good theory according to Hinduism is practice, not rote knowledge. Much better



and it is hoped that the knowledge (conceptual) part is known, understood, and understood, while the turn to practice contextually can be done equally well.

One of the simple ways that can be done is by formulating various devotional teachings in the form of the concept of "*Bhatre*" which is an acronym for the word "*Bhakti-Tresna-Eling*". Theoretically, the concept of "*Bhatre*" teaches people to integrate synergistically and harmoniously the teachings on prostration (*bhakti*) before God / Hyang Widhi ", then love (*tresna*) to fellow human beings and then remember (*eling*) the existence of the environment or the universe."

The practice of the concept of "*bhatre*" is very easy, cheap or simple to do but it is able to make people increase the quality of faith (*sradha*) and taqwanya (*bhakti*). What have been done by Hindus with more focus, especially the allocation of funds / materials only as much as possible for the benefit of the *Yadnya* ceremony (ritual) is not wrong, but it will be better and more meaningful if synergized in a way that is directly useful for efforts to generate solidarity. / social solidarity, including in terms of concern for the environment.

Therefore, in order for the ritual practice of *Yadnya* to be more meaningful and effective, it should produce results in the form of improved ethics (morals) and increased deepening and understanding of philosophy (*tattwa*). The sign is that the quality of Hindus in the form of mental, moral and spiritual attitudes should increase. This means that after carrying out the *Yadnya* ritual, the condition of life, both natural resources, and especially human life, should be more harmonious, harmonious, balanced and / or harmonious. In practice, the more often we carry out the *Yadnya* ritual, the higher the quality of the carrying capacity of nature and human ethics with behavior that respects fair and civilized human values. Not the other way around, the *Yadnya* continues to be carried out, but the state of nature and human nature is getting worse and tends to get worse, so that the ritual symbols of the *Yadnya* which are so ideal lose their meaning.

## CLOSING

The essence of *yadnya* is actually a form of symbolization from the philosophical aspect (*tattwa*) which is then manifested in the practice of the *upacara* (ritual) which psychologically and sociologically is expected to implement its meaning into superior behaviors based on ethical guidance (morals). In this way, the mandate contained in the implementation of the *yadnya* ritual can only be said to be successful, not because it has been completed (*sidhakarya*) but if it has reached the goal (*sidhaning don*), that is when the practice of the *yadnya* ritual is full of symbols, the ideal meanings



it contains, can be realized in the form of behavior that leads to the emergence of a sense of social care, mental improvement, increasing moral morals and attaining spiritual awareness.

The concrete form is none other than by improving the quality of the ritual *yadnya* as a way to cultivate the values of respect for the human dimension, in the form of sympathy and empathy in the framework of strengthening social solidarity among the wider community in the frame of brotherhood and togetherness and kinship, in order to build national diversity. within the unitary state of the Republic of Indonesia.

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# A New Paradigm of Dental Health Services in the New Normal Era

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## ABSTRACT

The COVID-19 pandemic has caused disruption to various things, one of which is the dental health service. People are afraid to come to the dentist because the virus can be transmitted through droplets / droplets of saliva. Disease transmission through droplets requires close contact, oral fluids from the patient or contaminated dental instruments or environmental surfaces create a potential way of spreading the virus to the operators and to other patients. The risk of cross infection between dental health care personnel and patients can be very high. The problem that arises is how dental practice should be managed to prevent the spread of the COVID-19 virus in this new normal era. This article provides a brief overview of changes in dental health services in the COVID-19 era. This article aims to examine changes in patient management and treatments in dental practice during the COVID-19 pandemic and to summarize recommendations for patient risk assessment and measures to prevent infections of health professionals and nasocomial transmission in dental clinics to recommend infection control strategies and patient management protocols to provide optimal dental care while preventing infection in a dentist's practice. It can be concluded that in carrying out dental care procedures during the COVID-19 pandemic, it is necessary to change patient management, starting from the selection of dental care and prevention of infection prevention and transmission. Understand the propagation mechanisms in the dental practice environment, if we hope to play our part in helping minimize the spread of this outbreak

*Keywords : New paradigm, dental health service*





## Introduction

Coronavirus disease (COVID-19) pandemic has rendered the world completely unaware and off-balance. The pathogen was described as a novel coronavirus (2019-nCov) in 2019 [1]. Corona viruses are a subfamily of viruses. The SARS-Cov-2, previously named 2019-novel coronavirus by the World Health Organization (WHO), is a beta-coronavirus [2]. All viruses contain nucleic acids, either DNA or RNA, and a protein coat which encases the nucleic acid. Some viruses are also enclosed by an envelope of fat and protein molecules [2,3]. Beta-coronaviruses are represented by two types of coronaviruses capable of causing severe respiratory tract infection, namely SARS-CoV and MERS-CoV [2].

The transmission of COVID-19 is variable and can occur in different circumstances: first through coughs and sneezes; second, through contact with surfaces directly exposed to the virus; and last by inhaling aerosols [2]. Transmission occurs through respiratory droplets produced by sneezing, coughing, and coming into direct contact with contaminated surfaces. Respiratory droplets are particles greater than 5 microns. They are caused by a patient who is coughing, sneezing, or talking [1].

Dentistry is one of the most exposed professions to the COVID-19 contagion [3]. Dental action using a rotary instrument such as a tool handpiece scalers and water water syringe where is the use of these tools produce high aerosol. Besides generates high aerosol, action dentistry causes that contact close between the doctor and the oral cavity patients so that dentists and personnel other medical related high-risk dental action to be exposed to SARS-CoV 2 [1,5].

Droplets in the dental practice are also generated through splash and spatters. Disease transmission through droplets requires close contact (within 1 m), as large droplets, due to their size, do not move far and do not stay in the air. The patient's oral fluids, material contamination, and dental unit surfaces can act as sources of contagion both for the dentist and the assistant, and for the patient himself or herself. Saliva and blood droplets that are deposited on the surfaces or aerosol inhalation generated by rotating instruments and ultrasound handpieces constitute a risk for those who occupy or will occupy those environments. Therefore, the use of disinfectants and personal protective equipment (PPE) remain essential for the proper development of the dental profession [1,5].

Alharbi et al. stated that a decrease in the patient's teeth and mouth since the closure of dentist practice only by 38%. It shows that society still needs dental action during a pandemic This COVID-19. Closing of practice premises dentists can indeed prevent spread of SARS-Cov2 but other effects of these can lead to decreased oral health Public. People in need emergency dentistry action will seek



treatment to the hospital, that is will add to the burden on the hospital in future this COVID-19 pandemic and add to it the patient may have been exposed to SARS-CoV2 as a result of visiting the hospital [6].

The consequences that will be faced from decision to postpone dental action which are elective, among others, patients with caries cases that should still be can be patched or maintained with root canal treatment will choose extraction so that the condition of the tooth can dealt with immediately. Tooth extraction will be have an impact not only in terms of aesthetics but also in a functional and systemic health and affect the quality of one's life [6].

Based on this description it is necessary to do a study of change action in management patient and dental action protocols in practice during a pandemic COVID-19 so that it can be used as a reference for dentists and patients who will perform dental and oral care as well prevent the spread of COVID-19.

### **Guidelines For Managing Dental Care In COVID-19 Pandemic**

Oral and dental health plays a role important in systemic health. Oral and pathogenic bacteria products such as antigens and endotoxins can enter with the bloodstream or the respiratory tract that can triggering such immunocompromising diseases diabetes mellitus, heart disease and inhalation [7]. Keep the condition of the teeth and mouth remains healthy in the future The COVID-19 pandemic is very important due to poor systemic conditions and comorbid disease is a risk factor contracting COVID-19 [8]. The COVID-19 pandemic calls for changes in habits and internal order practice in the field of Dentistry.

Based on this, Executive Board of the Dentists Association Indonesia (PB PDGI) have advised deferral of any non-urgent dental care and just do care for dentistry cases emergency. Even recommendations are interim and are constantly evolving, most of the dentists choose to close his practice premises since the March [1,4]. It is necessary to establish a clinical protocol to be applied in the working environment to avoid new infections and progressive virus spread [5].

### **Screening for COVID-19 status and triaging for dental treatments**

During the pandemic, it is recommended to perform exclusively emergency dental procedures to protect the medical personnel, the patients and to reduce as much as possible the consumption of personal protective equipment [8].



After a decision has been made that the patient needs to visit the dental clinic, the next step should be to evaluate the patients for signs and symptoms of COVID-19 infection to determine in which clinical setting they should be seen. According to Centers for Disease Control and Prevention (CDC) guidance, patients with active COVID-19 infection should not be seen in dental settings and should be referred for emergency care where appropriate transmission-based precautions are available [10].

Appointments should be scheduled such that social distancing can be maintained in the waiting room. Another alternative is for the patient to wait outside or in their vehicle and they can be contacted via telephone when it is their turn to be seen. It is recommended that the patients avoid bringing companions to their appointment, except for instances where the patient requires assistance. It is can be communicated to the patient at the time of scheduling an appointment [10].

Emergency dental patients that test positive for SARS-CoV-2 should be referred for emergency care where appropriate Transmission-Based Precautions are available. The indication for SARS convalescing patients was to postpone dental treatments for 1 month.<sup>7</sup> Same recommendation could be adopted for COVID-19 patients [9].

### Airflow at the dental practice

Recommendations are set for the recommended mechanical ventilation rate airflow current is  $> 12$  ACH for infectious red zone spaces (CDC, 2020). Based on this, it is recommended that when using ventilation for infection control, a minimum ventilation flow rate should be used higher than the existing requirements for mechanical ventilation above. This is for compensate for any fluctuations and difficulties in controlling airflow direction [11]. Practice room of the same volume (practice room dentist 4 x 3 m), it must have an average ventilation flow rate per hour 12 ACH: 160 L / s / patient and / or ventilation air flow rate minimum 160 L / s / patient at any time [11].



Simulation of the direction of airflow in a dentist's office [11].



Use of air conditioning with the concept is not flowing clean water from outside or circulation type, namely taking used air (air that is sucked back from the room) as supply air, so that no air change occurs is not very recommended in the dentist's practice room [11].

The use of a high volume evacuator (HVE) is a volume evacuator machine Air flow clean Dirty airflow must be thrown out exhauster, position below, from floor approximately 20 cm high with great suction ability over a period of time and installed in an evacuation system that can eliminate the volume of air greater than 100 cubic feet per minute (cfm). HVE can overcome aerosol reduction but technical specifications and must be considered by dentists in using HVE.



Portable high volume evacuator (HVE)

It seems clear that the key source of infection spread in dental practices is bioaerosol. Other causes of contamination, such as work surfaces and infected instruments, are typically well-managed, as most dental practices follow standard protocols prescribed for surface disinfection and instrument sterilization. Bioaerosol transmission tends to be the weakest link in the transmission chain. Various strategies can be employed in dental practices to reduce the generation of bioaerosol [1].

### **Pre-procedural mouthwash:**

Preoperative mouthwash containing oxidative agents, such as 1–1.5% hydrogen peroxide or 0.2% povidone iodine, were reported to be viricide. A 20-30 second mouth rinse has been shown to reduce bioload within the dentally generated aerosol. However it is not yet clear whether this will affect viruses and bacteria harboured in the nasopharynx. Surprisingly, Xu and colleagues have



reported the existence of SARS-CoV- 2 cell receptor, called angiotensin-converting enzyme II (ACE2) in oral mucosa and tongue. A mouth rinse with either 0.2% chlorhexidine or 0.2% povidone-iodine or 1% hydrogen peroxide is nevertheless suggested [12,13].

### Personal protective equipment (PPE)

Personal protective equipment (PPE) is a tool used by health workers every day to protect themselves themselves, patients and others when performing medical procedures. This PPE can protect health personnel from all potential microorganisms or toxic materials used in the field of medicine and dentistry. The type of PPE depends on the main duties and functions of each person health involved in dentist practice. According to the CDC, it is not specified PPE level, but this level is made to facilitate health workers categorize what PPE to wear based on these main tasks and functions [11].



Personal protective equipment

### Teledentistry

Innovative technological advancement has caused various changes in every sector. Medical science is not an exception, and new technologies have affected both the advancement of medicine and the way to deliver medical services. The use of information technologies in the medical and health care fields shows excellent potential for improving the quality and effectiveness of work done by medical organizations [14]



Teledentistry is a fast advancing branch which is an effective combination of technology with dentistry. It involves fast and effective transfer of information pertaining to patients through electronic gadgets over remote distances. Teledentistry as a form of telehealth provides a pragmatic approach to assess and record the oral health status postoperatively and hence improve the overall delivery of oral care [14,15].

The dentist can monitor the treatment outcomes using mobile photography ensuring patient confidentiality and also provide educational videos regarding maintenance of oral hygiene for the benefit of the patient. With a paradigm shift in dental care practice in progress during the current pandemic situation. Teledentistry holds the prospects to attend the treatment needs of the patients without confrontation. It not only eliminates any chance of exposure to the virus but also decreases the service cost and helps in patient education and most importantly social distancing can be maintained [15].

Teledentistry plays a vital role in various fields of dentistry. In Oral Medicine and Radiology, it helps in diagnosing and framing a treatment plan for difficult cases by easy access to various specialists through the transfer of radiologic images of lesions. In maxilla facial surgery, teledentistry may be helpful for appropriate treatment of complicated cases by analysis of advanced dental imaging techniques (like CBCT) which are often not available in one centre. While in Orthodontics it causes an extraordinary arrangement to take various sentiments on a routine cephalometric investigation for a superior treatment result. Additionally, teledentistry can be utilized for better patient consistency unfulfillment by sharing pre and post-treatment pictures. In Endodontics, it can be appropriate for an exact analysis of periapical sore and nearness of any supplementary root trench. In Prosthodontics, teledentistry alongside different computerized analytic devices (like CAD, CAM) can be a valuable instrument in outlining onlays and crown planning also [14].

## **Conclusion**

The COVID-19 pandemic represents a global challenge. Given the increased contagiousness of SARS-CoV-2, dental healthcare providers and the dentist in particular, have to adopt new protocols for a better infection prevention in the dental office and new working protocols aimed to prevent spreading the virus. Only by understanding the propagation mechanisms within the dental practice environment, should we expect to play our part in helping to minimize the spread of this outbreak.

Dental health care personnel need to understand the implications of potential transmission of the (SARS)-CoV-2 virus in a clinical setup and need to keep themselves updated with any new



information regarding this disease. New approaches such as Teledentistry will help dentists assist patients without adding the risk of cross infection. The recent state of affairs obligates the need to strike a balance between the safety of the healthcare professionals yet providing optimum dental care to the patients requiring emergency intervention.

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# Pursuing Hobby as Enjoyable Livelihood

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## ABSTRACT

Many people lost their job as lots of business were disrupted by pandemic COVID-19. This pandemic COVID-19 is still unknown when will be ended, while life must go on, so World Health Organization (WHO) and Government altogether have been preparing new normal era as recovery stage to live side by side with the Corona virus. In the new normal era, people need to maintain health protocol while doing their activities, to prevent the spread of Corona virus. New normal era impact people's interaction with others. So, like or dislike, people who want to survive, need to adapt in this new normal era, including livelihood, as it is one of the most important aspects in human life. By thinking out of the box, hobby which is something that people like to do, is offering opportunity to become enjoyable livelihood. The authors tried to explain briefly about the challenge and how to pursue hobby as enjoyable livelihood in the new normal era by using comprehensive literature reviews. Hopefully, it may inspire the readers to utilize their hobby to become wonderful livelihood that can bring benefit and joyful for themselves, their family, and as many beings.

*Keywords: pandemic COVID-19, new normal era, thinking out of the box, hobby, enjoyable wonderful livelihood*

## I. Introduction

The Corona Virus that surfaced firstly in China in December 2019 has spread to almost every country; causing death for millions of people and disrupting economy globally [16]. On 11 February 2020, World Health Organization (WHO) announced official name of Corona Virus disease as COVID-19 [1]. Then, on 11 March 2020 after evaluating this outbreak about three months and considering both the alarming levels of spread, severity, and inaction, WHO assessed COVID-19 as pandemic [17].



Many people lost their job as lots of business were disrupted by pandemic COVID-19. After more than 1 year, this pandemic COVID-19 is still unknown when will be ended, while life must go on, so WHO and government altogether are preparing new normal era as recovery stage to live side by side peacefully with the Corona virus. In the new normal era, people need to maintain health protocol while doing their activities, for their safety as well as to prevent the spread of Corona virus. New normal era impact people interaction with others and many aspects in life. People need to adapt with health protocol in their physical interaction with others, such as no more physical contact, using face mask, maintaining health, and keeping social distancing; people need to change their less healthy and careless habitual tendency to healthy and cautious manners; offices have been applying work from home (WFH) and offering online services; schools have been applying learning from home (LFH); and shops have been limiting its opening hours beside selling online. So, like or dislike, people who want to survive, need to adapt in this new normal era, including livelihood, as it is one of the most important aspects in human life. By thinking out of the box, hobby which is something that people like to do, is offering opportunity to become enjoyable livelihood.

This paper tried to describe about the challenges and how to pursue hobby as enjoyable livelihood in the new normal era by using comprehensive literature reviews. Hopefully, it may inspire the readers to utilize their hobby to become wonderful livelihood that can bring benefit for themselves, their family, and as many beings.

## **II. The Challenges to Pursue Hobby as Enjoyable Livelihood**

In this era with high technology and fast internet connection, people around the world can communicate easily to each other and people with the same hobby and interest can also communicate effortlessly to each other by joining online group, forum, and association. Especially in this new normal era, online communication technology has huge contribution to connect people around the world with no need to meet physically. Thinking positively, this new normal era offer wider opportunity to pursue hobby as enjoyable livelihood as people can do their lovely job with more flexible time from home.

The most challenging in pursuing hobby as livelihood is people need to be more discipline and focus to their target in using their time, as it can be threat to reach target, because time is constantly passed with never turning back. Another challenge is people need to think out of the box about livelihood and have the courage to go outside the comfort zone which used to be an employee. Lots of people were being trapped with boring and unhappy job but have no courage to step out from



that suffering condition, because that job and position might provide good remuneration that can support cost of living for themselves and their family comfortably, support their economic safety, receive respect, esteem, and pride from families, relations, friends, and society. So, for people who have comfortable livelihood but not happy and enjoy their job, will be very difficult and often make them very scary and shy to change their livelihood. But as Confucius (551- 479 BCE) advice to “choose a job that you love, and you will never have to work a day in your life” [2] and as described in Figure 1 that showed about what GDP (Gross Domestic Product) does and does not measure [15], so pursuing hobby as livelihood is worthy to try; because GDP and financial profit are only depicting productions and financial results, which all of those are only economic indicators, not including work satisfaction, health, and social costs, and even they don’t tell people whether economic growth or material wealth makes people satisfy and happier [7].

#### What GDP does and does not measure



Source: Deutsche Bank Research, Measures of Wellbeing 2006

**Figure 1. What GDP does and does not measure** (Adapted from Deutsche Bank Research Measures of Wellbeing 2006, cited in [15]).

Based on reference [12b], [12c], [12d], the definition of “hobby is a pursuit outside one's regular occupation engaged in especially for relaxation”, “livelihood means of support or subsistence”, and “subsistence means of subsisting such as the minimum (as of food and shelter) necessary to support life”.

Currently, most people do their hobby occasionally as relaxation or hobby is something to do voluntarily to fill their free time from their daily activities. Along this time, to do their hobby people need to put their effort and resources while normally hobby don’t produce money to fulfill the



minimum necessary to support life. Actually hobby might also produce money beside create happiness and contentment, though to realize it, is not always easy, because need to tackle the emerging challenges first.

Several challenges that might hinder in pursuing hobby as livelihood are such as lack of vision, character weaknesses, lack of talent and physical weaknesses, and lack of support from environment.

Not everybody has a vision in their life and as Lao Tzu (6<sup>th</sup> Century BC) said that “A journey of a thousand miles begins with a single step” [10], therefore, to have a vision can be the first step to have enjoyable livelihood. Vision is a mental picture of result that someone wants to achieve, it is not a vague wish or dream or hope, but vision is a clear and strong picture that will help to make the real result from real efforts; a vision is coming from the future while informing, energizing, and guiding the present’s effort to reach real result in the future [6].

A vision can be so powerful because vision can pulls ideas, people, and resources that will create energy to scrolling changes by inspiring, planning, organizing, actuating, coordinating, leading, and controlling actions in the rail to reach the setting goals and objectives [6]; and vision is also very important because people are easily to get distracted and easily to lose sight of what is important to them. “If you have a clear vision of where you want to go, you will not easily distracted by the many possibilities and agendas that otherwise divert you” [9].

There are several reasons why people struggle with vision such as being afraid that may not be succeed, believing that no need to have vision or need to have perfect vision in life, difficulty to visualize, the belief or cultural conditioning that limiting the range option in having a vision [9]. Several elements to explore life vision are such as: core values, interests, areas of focus, knowing strengths and weaknesses, dreams, skills, talent, and professions [9]. Carl Gustav Jung (1875 – 1961) gave advice that vision become clear only when someone can look into his/her heart; who looks outside, dreams; and who look inside, awakes [9].

Character is “one of the attributes or features that make up and distinguish an individual” [12a]. Human has weakness and strength characters. Weakness characters might hinder the strength and opportunity to succeed. Thomas Alva Edison (1847 – 1931) said that “Our greatest weakness lies in giving up. The most certain way to succeed is always to try just one more time” [3]. Edison was made a thousand unsuccessful attempts in inventing the light bulb; but rather than thinking that he failed a thousand times, he said that the light bulb was an invention with a thousand steps [18]. While Walt Disney (1901 – 1966) encouraged people by saying that “All our dreams can come true, if we



have the courage to pursue them” [8]. According to Lao Tzu (6<sup>th</sup> Century BC): “Knowing others is intelligence; knowing yourself is true wisdom; mastering others is strength; mastering yourself is true power” [10]. So, knowing and understanding oneself weaknesses and strengths are a starting point to reach success in life, and as agreed with Michelle Obama (1964 – now): “Success isn't about how much money you make; but it's about the difference you make in people's lives" [5]. In agreed with that, reference [8] showed in their science fiction film production that in the 24<sup>th</sup> century “when people have eliminated hunger, want, and the need for possessions, as they’ve grown out of their infancy and realized that power to control others is an illusion, so material needs will no longer exist and people will no longer be obsessed with the accumulation of things, then the challenge is to improve and to enrich themselves”.

Talent is natural endowment of a person [12e]. Naturally hobby relates with talent, as hobby is not something that hot in trend. So, when someone lack of talent or having physical weakness to do his / her hobby, he / she need to evaluate whether it’s really his / her hobby or only something that hot in trend. As a proverb said that “Practice makes perfect”, so someone with talent still need to practice diligently to perfect his / her hobby.

No being can live independently from their environment. Environment includes other beings and Mother Earth. In pursuing hobby as livelihood, people need to respect other beings’ need, law and regulation, ethics, social norms, religion norms, and the sustainability of the Mother Nature. When someone only think of money in doing their livelihood, often he / she will do anything to make money including un-ethical behavior. It will make difference if people think to create happiness and satisfaction for themselves and others in doing their livelihood, so definitely they will try their best efforts and actions to bring happiness and contentment for themselves and others that finally will give them profit ethically. For example: Philips as a global company has vision, mission, and ambition to create value with meaningful innovations to improve people’s health and wellbeing while respecting the limits of natural resources [15]. Meaningful sustainable innovation can be described as “creating new kinds of value for a healthy me in a healthy society on a healthy planet” [15]. Other example: someone who like hunting, need to have ethical manner by not only exploiting Mother Earth for his or her own desires for short time, but he / she needs to respect acts that protect endanger species, respect society and religion traditions and norms to avoid contradiction in doing his / her hobby while maintaining balance and harmony of life and its environment.



### III. Thinking Out of the Box

As social being, human is influenced by other human being and society. Other people' said and thought generally influence people, it could be in positive or negative way. People often shy, worry, and afraid about what others said if trying something that is different from commonly do by others; while in the other side people also feel scare to leave their comfort zone, feel sad and frustrated when loss or fail in something. By overcome their shy, sad, worry, afraid, scare, frustrated, and other weaknesses altogether perfecting 24 character strengths that associated with the six virtues of positive psychology theory (Peterson & Seligman, 2004 cited in [11]), people might see opportunities in the new normal era. The 24 strengths that associated with the six virtues of positive psychology theory can be seen in the Table 1. It is important to belief as a proverb said that "There is a will there is a way" and as Albert Einstein (1879 – 1955) advice that "Out of clutter, find simplicity; from discord, find harmony; in the middle of difficulty lies opportunity" [4], [13]. From author's experience, by having that belief, people still be able to keep peace and grateful though surrounding by problems. The authors believe that gratitude and kindness are key factors to receive blessings from others, Mother Nature, and the Universe.

The Six Virtues	The 24 Character Strengths of Positive Psychology Theory				
1. Wisdom	01. Creativity	02. Curiosity	03. Love of learning	04. Open-mindedness	05. Perspectives
2. Courage	06. Authenticity	07. Bravery	08. Persistence	09. Zest	
3. Humanity	10. Kindness	11. Love	12. Social intelligence		
4. Justice	13. Fairness	14. Leadership	15. Teamwork		
5. Temperance	16. Forgiveness	17. Modesty/Humility	18. Prudence	19. Self-regulation	
6. Transcendence	20. Appreciation of beauty and excellence	21. Gratitude	22. Hope	23. Humour	24. Religiousness/Spirituality

**Tabel 1. The 24 Character Strengths Associated with Six Virtues of Positive Psychology Theory**  
(Adapted from Peterson & Seligman, 2004 cited in [11]).





#### **IV. How to Pursue Hobby as Enjoyable Livelihood**

As Confucius (551- 479 BCE) advice to “choose a job that you love, and you will never have to work a day in your life” [15], so pursuing hobby as enjoyable livelihood might be a dream of everybody, even though it is not easy to realize that dream as described above. Therefore, in order to pursue hobby as enjoyable livelihood, the authors suggested several steps can be followed, such as:

1. Identify hobbies that have been own.
2. Analyze and assess which one is the most preferred; and which hobby has been supported by most and many strengths while has little or smallest challenges and threats; and choose the hobby which is not against human right, government law, act, rules, and regulation, social norms and traditions, religion norms, and living environment protection.
3. Research the market and the people who have the same identified hobby that have been succeed utilizing that identified hobby as enjoyable livelihood: what is their key success factors, analyze and understand how they can be succeed.
4. Determine the vision of pursuing that hobby: what kind of achievement that want to achieve by pursuing that hobby, besides to fulfill the minimum necessary to support life.
5. Choose and plan which aspect from the identified hobby that will be pursued as livelihood, such as: selling the product or service as a result from doing that identified hobby, or provide courses, training, and workshop to the community who have interest in that identified hobby, or selling tools, equipment, material, and support service to other people so they can do that identified hobby comfortably, and integrated those aspects later on.
6. Organizing all resources to start actuating the identified hobby as livelihood.
7. Introducing and promoting the product and/or service related to that identified hobby to the market and building networking to expand the market share.
8. Related innovation and creative thinking to expand other aspects of that identified hobby as livelihood.
9. Evaluating and controlling those processes above to ensure the sustainability of the livelihood that has been created from the identified hobby with respect to the human right, law, act, regulation, social norms, religion norms, and environment sustainability.



## Conclusions:

In this new normal era, online communication technology has huge contribution to connect people around the world, with no need to meet physically. Thinking positively, this new normal era offer wider opportunity to pursue hobby as enjoyable livelihood as people can do their lovely job with more flexible time from home. By having clear vision and virtues, identified weaknesses, never giving up, utilizing strengths, keep practicing the hobby to make perfect, sharing, collaborating, networking, and continuing the creative innovation, hopefully will bring success and sustainability in pursuing hobby as enjoyable livelihood for the benefit for themselves, their family, and as many beings.

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# **Student Perception on the Effectiveness of Remote Sensing Learning with Youtube Media in the Pandemic Covid-19**

(Case Study on Social Studies Education Students, Faculty of Tarbiyah and Teacher Training, Syarif Hidayatullah State Islamic University Jakarta)

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## **ABSTRACT**

The Covid-19 pandemic has impacted almost all fields, including education and learning. Learning must be carried out using online methods to avoid the spread of the Covid-19 virus, both learning at the elementary school level to the university level. Remote sensing courses are courses that are not only theory-based but require practice using certain software in the learning process, so that when faced with a pandemic, appropriate and efficient media are needed to support the learning of remote sensing practices. This study aims to determine student perceptions. on the effectiveness of remote sensing learning with Youtube media during the Covid-19 pandemic, a case study of Social Science (IPS) students of the Faculty of Tarbiyah and Teacher Training (FITK) Syarif Hidayatullah State Islamic University Jakarta. The sample in this study amounted to 20 students who had experienced remote sensing learning system with youtube media. The sample is given a perception questionnaire that has been tested for validity and reliability which is made on Google Form. Based on the results of the research it can be concluded that according to students



learning the practice of remote sensing with youtube is very effective, because they can follow the steps easily from the sequence that must be followed in this practice by watching videos on youtube and they can also download the video and watch it. by using a cellphone

*Keywords: Perception, students, effectiveness, learning*

## INTRODUCTION

The Covid-19 pandemic has brought changes in all fields, be it economic, social, cultural and education is no exception. The education sector, especially the one that is most affected, is the learning process starting from the elementary school level (SD) to tertiary institutions. This is in line with Sulata's (2020)[11] statement which states that one of the areas that have an impact due to Covid 19 in Indonesia is the field of education. The learning process that was previously carried out with a face-to-face model between teachers and students when entering the pandemic, to be precise in March 2020, all learning must be done with an online or online model. Not a few schools and even colleges have finally closed their academic routines in order to break the chain of Covid-19 transmission, which until now has infected tens of millions of people worldwide, and what is even more terrifying is that there is no antidote or vaccine to cure this virus. (Dewantara 2021)[5] This is done to reduce or avoid the occurrence of complications that can increase the likelihood of being exposed to the Covid-19 virus. Covid-19 is a new type of disease that has never been previously identified in humans (Astini, 2020)[3].

The learning process with an online or online model is of course something new for some educational institutions because so far they have not done online learning, so they have to find what media is right to use for online learning so that learning continues to be effective and achieved from the learning objectives. Online learning is considered by the Government as the only solution to ensure the continuity of the learning process from elementary school to college continues (Arizona 2020)[2]. Lots of media are currently available for online learning, for example with media zoom meetings, youtube, google meet, google classroom and others. Of course, each of these media has its own advantages and disadvantages. The ability of lecturers and students to use information and communication technology in online learning has an effect on the achievement of learning objectives. Lecturer and student unpreparedness in using online learning platforms is one of the problems that can hinder the effectiveness of online learning. (Damayanti 2020)[4] Some of the obstacles faced by teachers and lecturers in online learning are when learning is in the form of practice which requires a detailed explanation regarding the stages that must be carried out. One of the media used for practical learning is youtube media that YouTube can help student-centered learning or Student Centered Learning and when materials that require examples of objects that are not in the school laboratory students can learn by looking directly at the learning via Youtube Antika (2014)[1] In addition, youtube contains several elements, namely images and sound (video)



so that you can feel it directly (Samosir 2018)[9] This research was conducted to determine students' perceptions of learning remote sensing practices in the early days of the Covid-19 pandemic by using the youtube study media. to students of the Social Science Education Study Program (IPS), Faculty of Tarbiyah and Teacher Training, Syarif Hidayatullah State Islamic University, Jakarta.

## RESEARCH METHODS

This research was conducted on students of Social Science (IPS) education, Faculty of Tarbiyah and Teacher Training, Syarif Hidayatullah State Islamic University Jakarta, namely students of the 6th semester class 2017/2018 who have contracted Remote Sensing courses. The sample in this study amounted to 20 students who have contracted remote sensing courses and learning remote sensing learning systems using yuotube media. The sample was taken by using purposive sampling technique. The sample was given a perception questionnaire that had been tested for its validity and reliability which was made on Google Form. For the data analysis method used is by using the Likert scale "The Likert scale is used to measure the attitudes, opinions, and perceptions of a person or group of people about social phenomena" (Sugiyono, 2011)[10]. Then make a percentage and describe it from the data obtained.

## RESULTS AND DISCUSSION

Characteristics of response based on sex

Of the 20 students who were respondents in this study, based on their gender, 7 were male and 13 were female. Comparison of respondents based on gender is shown in Figure 1.

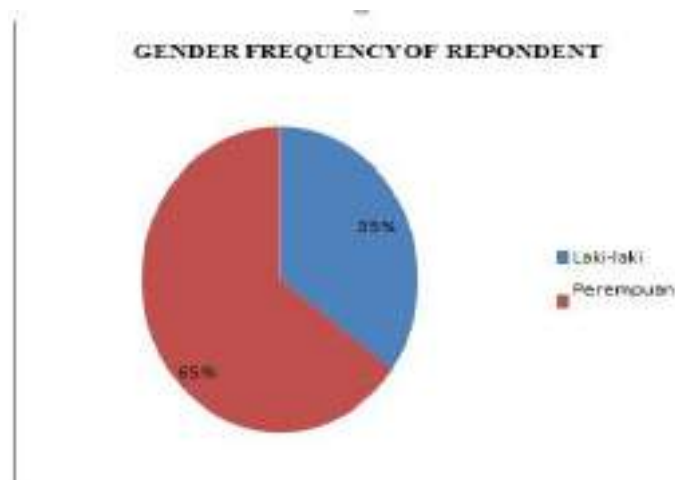


Figure 1 Comparison of the number of respondents

Based on Figure 1, it can be seen that female respondents have a higher percentage of 13 respondents (65%) compared to male respondents who are only 7 (35%).





Students' perceptions of understanding the essence of remote sensing courses through a learning system using youtube media

Remote sensing is the science and art of obtaining information about objects, areas or symptoms by analyzing data obtained using tools without direct contact with the object, area, or phenomenon being studied (Lillesand and Kiefer 1979)[7]. The essence of remote sensing learning is to understand the related theory of remote sensing both the understanding of vehicle components and others, besides that students are also required to be able to practice image processing both low- resolution images and high-resolution images. Students' perceptions of understanding the essence of remote sensing courses are shown in Figure 2.

### STUDENTS' PERCEPTIONS OF UNDERSTANDING THE ESSENCE OF REMOTE SENSING SUBJECTS

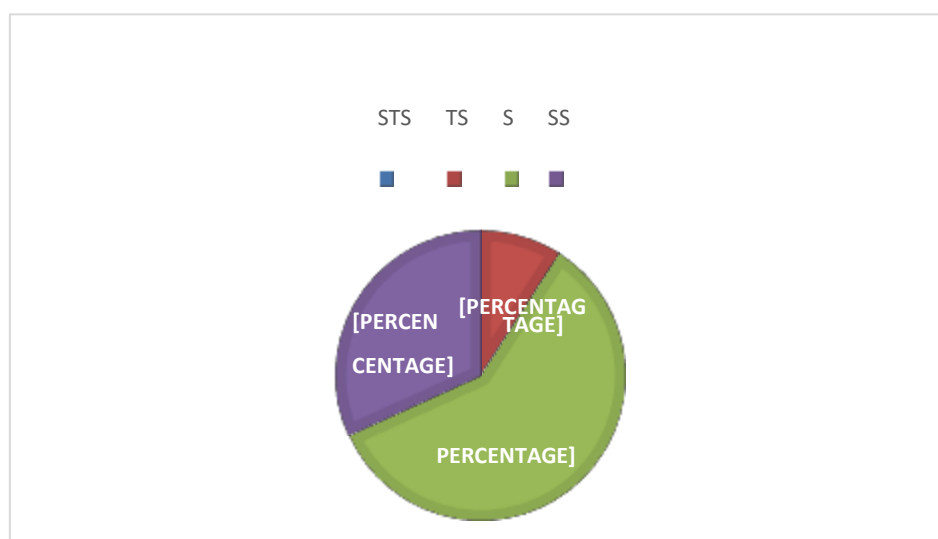


Figure 2 Students' Perceptions of Understanding the Essence of Remote Sensing Subjects

Based on Figure 2, it can be seen that 59% of students agree and 32% strongly agree that remote sensing learning using YouTube can help understand the essence of remote sensing lectures well, while the remaining 9% disagree and 0% choose strongly disagree. Seen in the diagram in Figure 2, it means that remote sensing learning using YouTube can help understand the essence of remote sensing lectures properly.

Students' perceptions regarding YouTube as an appropriate medium for remote sensing practice learning

Learning media can briefly be stated as something (can be a tool, material, or situation) that is used as an intermediary for communication in learning activities. So there are three concepts that underlie



the limitations of learning media above, namely the concept of communication, system concepts and learning concepts (Miftah 2013)[8]. Learning media during the pandemic is directed to choose the right media, namely media that can be accessed from anywhere because students will access this lecture material from home. each of them. Students' perceptions of the accuracy of YouTube as a medium in remote sensing practice learning are shown in Figure 3.

**THE ACCURACY OF YOUTUBE AS A MEDIUM IN  
REMOTE SENSING PRACTICE LEARNING**

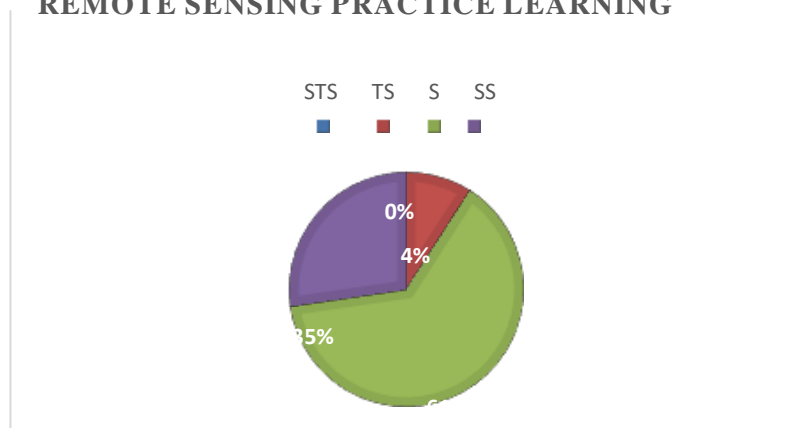


Figure 3 The accuracy of YouTube as a medium in remote sensing practice learning

Based on Figure 3, it can be seen that most people agree with the number of 61% and 35% strongly agree that YouTube is the right medium for learning remote sensing practice, while the remaining 4% disagree with this and no one chooses to strongly disagree, namely 0 %. Therefore, according to the diagram in Figure 3, learning remote sensing practice using youtube media is correct.

Students' perceptions regarding the ease of remote sensing practice using youtube media

Based on the results of data processing, it can be seen that the majority of students find it easy to practice remote sensing with the help of tutorials uploaded on YouTube, because students can easily repeat the practical steps they have to go through to complete their assignments. Students' perceptions of the ease of remote sensing practice using youtube as shown in Figure 4.



#### EASE OF REMOTE SENSING PRACTICE WITH YOUTUBE MEDIA

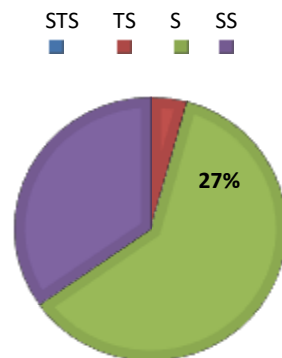


Figure 4 Ease of Remote Sensing Practice with Youtube Media

Based on Figure 4, student opinions regarding the ease of remote sensing practice with youtube media in the diagram as many as 64% agreed and 27% thought strongly agreed, the remaining 9% thought they disagreed but no one answered strongly disagree. This means that the youtube media can make it easier for students to practice remote sensing.

Students' perceptions of the effectiveness of remote sensing practice learning using youtube media

In the learning process, a teacher or lecturer is looking for effective learning alternatives in order to find a learning model that can easily achieve these learning achievements. The effectiveness of this learning can be influenced by one of which is the selection of the right learning media, in this case the selection of the right media in online learning during the Covid-19 pandemic. Based on the results of the analysis of students' perceptions on the effectiveness of remote sensing practice learning using YouTube as shown in Figure 5.

#### THE EFFECTIVENESS OF REMOTE SENSING PRACTICE LEARNING USING YOUTUBE MEDIA

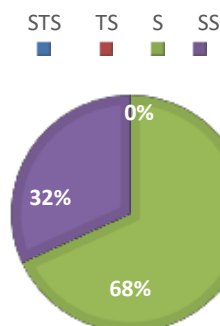


Figure 5 The Effectiveness of Remote Sensing Practice Learning Using Youtube Media

Based on Figure 5, it can be seen in the diagram of the YouTube media that it can streamline remote sensing practice learning. As many as 68% of students agreed and 32% of students strongly agreed.



Students' perceptions of the level of comfort through learning remote sensing practice using youtube media

Convenience in the learning process is absolutely necessary for effectiveness in a learning process. (Kolcaba 2003)[6] explained that reality is a condition that has fulfilled the basic human needs which are individual and olistic. Students' perceptions of the comfort level of remote sensing practice learning using youtube as shown in Figure 6.

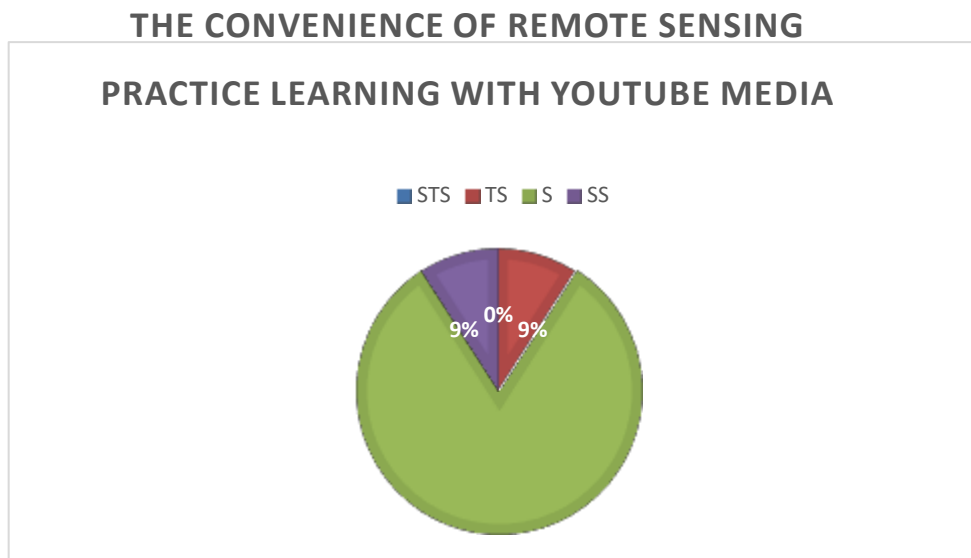


Figure 6 The Convenience of Remote Sensing Practice Learning with Youtube media

Based on Figure 6, it can be seen that as many as 82% of students agree that there is comfort and openness through learning remote sensing practices using the youtube media. The remaining 9% of students strongly agree, as well as students who disagree and 0% of students think strongly disagree. From the results of the student's opinion, it was concluded that learning remote sensing practice using youtube media can lead to comfort and openness.

## CONCLUSION

Based on the discussion previously described, it can be concluded that students have a perception by learning remote sensing practice with YouTube media, they can understand the essence of remote sensing lectures, besides that they find it easy to follow the stages in remote sensing practice in this case is the practice of satellite image processing , students feel more comfortable doing remote sensing practice because the practical stages can be broadcast over and over again, so that youtube is an effective medium in learning remote sensing practice.



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# Performance of Performing Arts in Bali In the Newnormal Era

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## ABSTRACT

The COVID-19 pandemic situation has had a major impact on the arts ecosystem in Bali where the entity and quality of the performing arts can no longer be fully enjoyed. A condition in which the totality of art changes in form and method of presentation. The interesting thing here is the emergence of the idea that the virtual medium is a space for art actors to persevere in conveying feelings and intentions in the form of works of art. The problem here is 1) whether virtual space is able to provide strength (*taksu*) for the artists themselves in their appearance, 2) whether virtual space is sufficient to help in expressing all forms of ideas they want to present or vice versa, and 3) whether virtual space actually causes degradation artistic value or vice versa. This paper uses an art criticism approach, by analyzing several virtual art performances. The theoretical approach used is the Hindu aesthetic theory which is a way of looking at a sense of beauty (*lango*) which is bound by religious values and as a comparison, postmodern aesthetic theory which summarizes contemporary-standard art forms with or without adopting traditional values. The results of this paper are expected to provide an overview of how the role of virtual media is very likely and influential on the Balinese performing arts ecosystem and opens public awareness about the advantages and consequences of virtual new media which in a pandemic situation can still enjoy performances while waiting for conditions to return to normal.

**Keyword;** *survival, performing arts, newnormal*

## I. INTRODUCTION

Koentjaraningrat stated that religion in relation to culture is that religion is a religious system. Koentjaraningrat (1987) states that the religious system consists of five components which are closely related to one another. The five components are (1) religious emotion; (2) belief system; (3) System of rites and ceremonies; (4) Equipment for Rites and Ceremonies; and (5) Religious people. It is a reality in the empirical world that the relationship between religion, culture and art will appear in the system of rituals and ceremonial equipment. Religion assigns sacred values or belief systems to it, which causes religious emotions to emerge in adherents [1].



The relationship between religion and art will be clearly seen in the system of rites and ceremonies, as well as in ceremonial equipment. Especially in Hindu life in Bali, which is always associated with a fairly large ritual and full of artistic value. If observed physically, it will be clear that whatever the Balinese Hindu community does in carrying out their religious teachings is with aesthetic or artistic values. Art that is carried out in connection with the implementation of Hinduism will foster religious emotions so that people feel it is full of sacred values. Therefore, in Bali, art in relation to religion or its sacred values can be divided into three things, namely sacred religious dance, which is the art of dance performed in temples and in places related to religious ceremonies. Second, *Bebali Dance / Entertainment* (Ceremonial Dance) is a dance that functions to accompany ceremonies and ceremonies. The third is the art of *balih-balihan* / performance (secular dance), which is all noble dance arts that are classified as guardian dances and *balih-balihan* and have a function as a serious art and entertainment art, aiming to provide dance performance dishes which are expected to get responses from the audience. (Bandem, 1985: 7) [2].

Sociologically, the performing arts are the flesh and blood of the people who support it so that it makes its existence in a glorified position. Because its existence is not only as entertainment but as a guide and future life order (Story, 2020: 2) [3]. In normal times it has become a tradition for the community where performing arts activities can be enjoyed. Its presence provides its own satisfaction where people as connoisseurs who are thirsty for entertainment are relieved of their taste needs and for art actors themselves will feel proud to be able to share their artistic abilities. An artist's pride if he is able to share his feelings and make the audience go home armed with various kinds of turmoil and positive messages that have been conveyed in the show.

The condition of the Covid 19 pandemic that began last year, to be precise in March 2020, has made religious ceremonial activities, the artistic ecosystem that has been a legacy from generation to generation, has immediately turned into a new habit where all activities that carry a large number of people who have the potential to spread the virus begin to be controlled and limited. the participants. The Newnormal era is a term used for a new order in the recovery period due to the impact of the corona pandemic, which is more or less interpreted as a form of new order behavior that follows health protocols. Policies from the central government have begun to be launched which have an impact on limited religious activities, as well as the closure of the tourism sector which is a contribution to the sustainability of the economy on the island of Bali. The pandemic condition has not only cut off the world of tourism, but the artistic traditions involved in the activities of indigenous peoples in Bali have also experienced an unfavorable impact. The entity and quality of performing





arts can no longer be enjoyed as whole as before. People are starting to experience a dilemma towards sacred arts such as *Ratu Gede napak siwi*, which is believed to be the power in neutralizing the plague-stricken situation where some people resist the government's appeal for reasons of tradition that cannot be eliminated but some regions do not dare to present because they are afraid of the spread of a frightening virus. . This apprehensive condition is not only stifling for the community but also includes the art workers themselves. In the situation of Large Scale Social Restrictions (PSBB), many art performances have been postponed or even canceled. This relatively long situation has resulted in the loss of creative space for art workers.

Seeing this situation, how do art creators respond so that the art ecosystem is maintained. In this case, a strategy is needed and as we all know that art can help overcome the problems that are currently being faced, where art is a creative medium that is very flexible and able to respond to various problems as well as an inspirational medium and creates an alternative in finding solutions to problems during a pandemic. struck.

The government, in this case the Bali Provincial Cultural Service and also related agencies, such as the art community, art studios, provide space for creators, artists, art workers affected by Covid to keep creative, produce achievements and indirectly participate in overcoming the spread of Covid 19 by physical distancing. New habits in art give new colors to the appearance of the artworks that are presented. Like the use of masks, face shields, and applying physical distancing in presenting characters in dances. On the one hand, carrying out obligations based on policies, on the other hand, is very contrary to the passion of the soul of the actor himself because the expressions shown are limited by face shields. This is of course very contradictory and has an impact on the occurrence of a degradation in the standard value order of art itself, which leaves the actors in a dilemma. The interesting things discussed here are 1) whether virtual space is able to provide strength (*taksu*) for the artists themselves in their appearance or vice versa, 2) whether virtual space is quite helpful in expressing all forms of ideas that want to be displayed or vice versa, and 3) whether virtual space in fact, it results in a degradation of artistic values or vice versa. However, in this pandemic situation, virtual performances are a way out as a medium to maintain the artistic ecosystem as well as anesthetic for the artist's inner mood so that he becomes more enthusiastic in facing the pandemic and as a support for the existence of art actors in accommodating all forms of creativity in their work.



## II METHOD AND THEORY BASIS

The research method used in this paper is the art criticism approach method for several forms of art that originate from virtual media such as Youtube, face books related to virtual art performances during the Covid 19 pandemic. According to Kwant (1975: 19) art criticism is an assessment of the reality we face in the light of norms. Thus, the context of assessing the reality faced in the spotlight of norms means how to provide interpretations or descriptions of things that happen, based on a set of values or rules that apply [4]. Art criticism in this case is used to provide a critical analysis of the fact that the use of virtual space as a medium for traditional art imagery and artist creativity has experienced a degradation. Of course, the discussion is based on norms, especially the aesthetic norms contained in art in Bali in particular.

Every result of Balinese cultural creativity, including art, cannot be separated from the noble values of Balinese culture, especially aesthetic values originating from Hinduism (Triguna, 2003: 94) [5]. Aesthetics is derived from the Greek word *aisthesis* which can be interpreted as a beautiful sense of pleasure that arises through the application of the five senses (Djelantik, 1999: 5) [6]. Hindu aesthetics is essentially a way of looking at the sense of beauty (*lango*) which is bound by Hindu religious values based on the teachings of the Vedic scriptures. There are several concepts that form the main foundation and are considered important in Hindu aesthetics such as; the concept of holiness (*Shiwam*), the concept of truth (*Satyam*), and the concept of balance (*Sundaram*). Slamming theory is a postmodern theoretical approach [7].

Postmodern art has different characteristics from the art of advanced modernism. Some of the characteristics of postmodern art include the loss of boundaries between art and everyday life, the collapse of the distinction between high culture and mass / popular culture, the rise of eclectic and mixed styles, the emergence of kitsch, parody, pastiche, camp and irony, the decline in the position of art creators, as well as the assumption of art as repetition, perpetual art (Featherstone, 1988 in Hidayat, 2019) [8]. Likewise Lyotard notes some of the main features of postmodern culture. According to him, postmodern culture is characterized by several principles, namely: the birth of a computerized society, the collapse of the great narratives of modernism, the birth of the principles of delegitimation, disensus, and paralogy. The computerized society is the name given by Lyotard to refer to the post-industrial symptoms of Western society towards the information technology era. The socio-cultural reality of today's society, as he has carefully examined in Quebec Canada, is a society that lives supported by the means of information technology, especially computers. With computerization, the principles of production, consumption and transformation undergo a radical



revolution (Hidayat, 2019) [9]. Postmodern theory as a scalpel is that in the new normal era, art has a new medium where virtual space is a medium for imaging and creativity in order to maintain a sustainable ecosystem.

### **III DISCUSSION**

In the midst of the government's efforts to image Bali as being able to survive during a pandemic, to be precise where the new normal era was announced, various related parties began to make improvements by adjusting health protocols. No exception, the world of performing arts, especially those that are still traditional in nature, is taking part in this image so that it can be enjoyed again by the art-loving community as well as tourists, both domestic and international, in new ways and appearances. Various art performances that are regular in nature can still be presented in a pandemic situation by utilizing virtual media. The government, in this case related agencies such as the Cultural Office, Education agencies as well as the arts community, art studios organize various events that involve the arts in the success of the event as well as the event of Dance competitions as a forum for dance actors and creators to keep active, be creative and produce. achievement.

#### **a. Utilization of Virtual Media in Art Imaging**

The appearance of performing arts in a pandemic situation by utilizing virtual space gives a new color to the artwork where in its appearance there are additional accessories such as appearing using masks and face shields or face shields. Likewise, there are also those who eliminate other supporters such as appearing without wearing complete costumes which support the character and identity of the dance on the grounds that they are not burdened by costs. Considering that the components of the dance during one performance require quite expensive costs such as make-up fees, costume rental fees, consumption, ceremonial needs, registration fees when participating in competitions and other necessities.



A group of female dancers wearing the Sekar Jagat dance costume  
 obtained from the Facebook account @Danu Segara  
<https://www.facebook.com/photo?fbid=3342220815816442&set=pcb.3342216099150247>  
 document: Screenshot I Made Sugiarta, 2021

The picture above can be seen the dancers preparing to dance the welcoming dance "Sekar Jagat" created by an NLN artist. Swasthi Widjadja Bandem with composer I Nyoman Windha in 1988. From the very beginning this dance was created, this dance has had a standard dress like the appearance in the photo (except face shield). However, due to health protocol reasons, dancers use face shields in their performance.

Face shield is a face shield which in the context of COVID-19 prevention aims to prevent the face from splashing (droplets) of other people's body fluids so as to prevent transmission of the virus into the body. It becomes interesting when traditional Balinese dance with the standard of the costumes is then "plastered" with a tool that is not a Balinese dance costume which is used as personal protection from splashing other people's body fluids when dancing on stage (Surya Pradhantha, 2020) [10]. With the addition of face shield accessories, the Sekar Jagat dance performance has a new color which contrasts sharply with the costumes worn.



Mascot dance performance at the Graduation Ceremony  
 Document; I Wayan Muka, 2020



Visually it is clear that each dancer is wearing a mask when performing a dance that is so sacred to the relevant agencies. The mascot dance (typical) which is often referred to as the greatness dance is a dance that is an identity for an institution that is only presented at certain events (sacred). With the reason that this health and dance protocol can be presented, the dancers wear masks as lip protectors which actually make the dancer's expression invisible. As we know, the characteristic of Balinese dance lies in one of them is facial expressions.



Nelayan dance

Source: channel youtube Udayana arts UKM

link <https://youtu.be/XfRkfm6FGwk>

Doc: screenshots of I Made Sugiarta, 2021

In the picture, it can be seen that the dancer does not use complete attributes in accordance with the dance characters conveyed when participating in the “Nelayan” dance competition. The pandemic situation made the organizing committee make a decision where the participants were not allowed to wear costumes according to the initial idea of this dance. The reason was that the committee was well aware of the very difficult economic situation when the pandemic hit. As the old adage "is like a vegetable without salt", where a condition loses its importance. Without realizing it, the costume is a very important support in the integrity of the dance performance so that its character and aesthetic value can be fully captured by the audience.

## **b. Utilization of Virtual Media as a Space for Creativity**

Baron (1969) in Hanifah 2015 stated that creativity is the ability to produce or create something new [11]. Likewise Utami Munandar (1995: 25) creativity is a general ability to create something new, as the ability to provide new ideas that can be applied in problem solving, or as the ability to see new relationships between existing elements. there is a medium where the imagination



of the arts can freely be visualized with the help of technology that is so sophisticated today without reducing the formulation of values contained in the artwork displayed (Hanifah 2015) [12].

Since the performance art format was brought into the form of virtual media, it has made creators, artists or artists have a new passion for creativity. Virtual space provides new stimulation for artists in creativity where all forms of limitations that cannot be visualized in real terms in situations of place, space and time in performances, for example on a stage space or stage, with a stage in a virtual space can be visualized with the help of an editor. If we refer to the notion of dance itself, it is an embodiment or demonstration of the complexity of Hindu-Balinese cultural values through the fabric of human body movements (Dibia, 2013: 1) []. This indicates that the body is the main medium for expressing imaginative creativity. This is what makes Balinese dance different from other dances in other regions. Based on the prevailing norms, Balinese people in general see dance as a fabric of motion that contains beauty values so that it can evoke a sense of *lango* (amazed).

In some virtual performances, there are currently some new colors found in performing arts that are highlighted not as a series of movements as a medium for expressing imagination but rather a concrete form of technology assistance as an allure in supporting the beauty of works of art. This is one of the forms of post modern art where art forms are combined with modern, contemporary, and contemporary styles as a market taste (Hidayat, 2019) [13].



1) To the left of the Raja Subali scene and 2) to the right of Hanoman Terbang

1) Source: Face Book post by @Nyoman Sariada

Link: [https://m.facebook.com/story.php?Story\\_fbid=4080727228637942 & id = 100001021151632](https://m.facebook.com/story.php?Story_fbid=4080727228637942&id=100001021151632)

2) Source: youtube with the link: <https://youtu.be/NTrkFfedgus>

Dock. Screenshots I Made Sugiarta, 2021

As in the picture above, you can see how the visuals of the Monkey King in the flying scene are made. What is interesting here is that there is a difference in terms of delivery, where in the left image, the visual form is conveyed on the basis of composition processing by involving several dancers who are imagined as visuals from a collection of clouds thus it is as if King *Sugriwa* (Red





Ape) is flying above the clouds. Another case with creativity in a virtual space where the Hanoman character is only lying face down in a room with a green screen background and then the dancer moves non-locomotives imagining the flying scene. With the help of technology by adding visual effects such as clouds, the dancers seem to be flying in the middle of the clouds like the picture on the right.



The scene of the Goddess's majesty  
Dock. I Made Sugiarta 2021

The image above is an illustration of how the artist's imagination in visualizing the symbol of strength or beauty of the vigor that the audience wants to display so that it can be enjoyed by the audience. The difference between the two images above provides the following information; In the picture on the left, the artist's creativity visualizes the beauty and power of vigor by giving a touch of property and compositing the dancers to resemble a lotus flower. However, the result is different from a touch of technology where the choreographer / artist is no longer draining, because only with a touch of technology the idea to be conveyed can be easily conveyed. One of the advantages of virtual media is that it is providing solutions for artists to support the beauty of their work.

### c. The Impact of Pandemics and Virtual Media on the Arts

Balinese dance is an embodiment or demonstration of the complexity of Hindu-Balinese cultural values through the fabric of human body movements. Every pose and movement phrase of the dancer is bound by time and space, which reflects the concept of cosmology, outlook on life, beliefs, behavior, and aesthetic principles of Balinese society based on Hinduism. Cultural content like this makes the presence of Balinese dance unique compared to dances in other areas, both in eastern and western cultures (I Wayan Dibia. 2013: 1) [14]. The uniqueness of Balinese dance can be felt from all these aspects, including: a) *Wiraga*, which includes *Agem* (basic attitude / standing),





*Tandang* (moving movements) and *Tangkis* (hand variations). This *wiraga* technique is usually adapted to the male and female dance genres. b) *Wirama*, namely Balinese dance musicality known to be rich in motives, dynamic and expressive. c) *Wirasa*, known as *Tangkep*, which contains expressions or changes in emotions reflected through the face of *encah cerenggu* (a change in another expression) in Balinese dance. Variations of changes in expression that are so dynamic and expressive constitute identity, a strength that makes Balinese dance different from dances in other areas outside Bali.

In Bali, dances that are dominated by *tandang* and *tangkis* that look vivacious and dynamic are called *igel nguda* (immature) which means that they still prioritize physical exercise and energy without feeling and soul, while dances that are dominated by *agem* and *tangkep*, although less agile and it looks simpler, it is called *igel wayah* (ripe) because it involves taste and soul processing (I Wayan Dibia, 2013: 65) [15]. If the four aspects mentioned above can be applied in presenting a dance, it is strongly believed that the power of *taksu* (soul emission) will accompany it so that the audience gets a sense of *bhawa*. *Bhawa* is an emotion or feeling and is understood to be the cause for the awakening of taste. There is no taste without *bhawa*. *bhawa* divided into three; 1) *Vibhawa* emotion generated by the state and situation of the object. 2) *sthayibhawa* the dominant basic emotions in humans, and 3) *vyabharibhawa*, namely temporary emotions or mental states that arise in the process of awakening feelings (Suka Yasa, 2007: 6) [16]. With virtual space as a medium for performing arts, perhaps the three aspects above become blurred in fulfilling the desired feeling, considering that the actors and the audience seem to be isolated and limited by the virtual space itself.

It becomes a problem if the aesthetics of Balinese dance are undermined by additional attributes for health reasons such as using face shields and masks in their appearance. Performing arts, especially dance, are arts that can be enjoyed both audio and visually where the desire of a dancer on stage certainly wants to present the best and most beautiful performances to the audience. So there are several consequences that must be faced by traditional Balinese dance in its appearance which will be analyzed in the following table:

#### **The advantages of virtual media:**

- The advantages of virtual media Image of traditional Balinese dance by adhering to PROKES (health protocol)



## Consequences

- The use of a face shield has an impact on expressions that are not visible. Expressions, animations and changes in facial expressions of Balinese dancers are known to be very dynamic and expressive, so it is very detrimental if the appearance of dance uses a mask / face shield.
- The use of masks causes the beauty of Balinese show make-up not to be fully enjoyed which has an impact on the aesthetics of the *Wirupa* aspect in Balinese performing arts. Because what can be seen is only the eye.
- Balinese dance is identical with the term "Ngunda Bayu" or the regulation of energy through breathing. How a dancer can perform optimally due to the disruption of respiratory circulation, will greatly affect the dancer's *Wiraga* aspect in his appearance.
- The use of additional attributes and reducing the make-up component in Balinese dance is very disturbing to the aesthetics of costumes, which is an aspect of *wirupa* that affects the integrity of its appearance.
- The dancer cannot directly feel the audience's response which usually creates energy for the dancer
- Dance drama performances which usually require audience response as a stimulus / stimulus for dancers in portraying characters do not get a direct response, so that dancers sometimes find it difficult to provide the desired stage atmosphere. For example, *bondres* / folk dancers (funny roles) who require a direct response from the audience.

Likewise, virtual space is a space for creativity. Basically, artists in creating traditional art works are not far away and are still thick with their religious and cultural values. Hinduism is the main source of the values that animate Balinese culture. Every result of artistic creativity cannot be separated from the noble values of Balinese culture, especially aesthetic values that originate from Hinduism. Hindu aesthetics is essentially a way of looking at the sense of beauty (*lango*) which is bound by Hindu religious values based on the teachings of the Vedic scriptures. There are several concepts that are the main foundation and are considered important in Hindu aesthetics, such as the concept of purity (*Shiwam*) which essentially concerns divine values which also include *yadnya* (Sacrifice) and *taksu*. Hindus believe that anything of artistic value is a creation of God. The concept of truth (*satyam*) which includes the values of honesty, sincerity, and sincerity. The concept of



balance (*sundaram*) which includes similarities and differences can be reflected in several dimensions. (Triguna, 2003: 94) [17].

If the three concepts of Hindu beauty are associated with the use of virtual performances that have been running during the new normal era, of course, there are some obstacles in the purity of the art delivery by the artists in some of their works. Based on several new performances of virtual artwork that we can observe on the YouTube channel, Instagram and other content we can analyze as follows:

#### **The advantages of virtual media:**

- Technology helps get around the weaknesses of art and dance skills

#### **Consequences**

- The strength of the dance technique seems to be less than the visual of the original form.
- Dealing with the weaknesses of dancers, in fact, teaching them ignorance of the dancers' abilities makes them not motivated to develop.
- The creative work of artists who are always spoiled with the help of technology will have an impact on the development of the artist's imagination in the future.

#### **The advantages of virtual media :**

- Maximizing and perfecting the aesthetics of the dance form with the addition of elements of effect from the editor

#### **Consequences**

- The quality of movement and expression is impure / emanating from the dancer because they are deceived by additional effects such as visual shadows, and can only be seen in the blink of an eye.
- Packaging works of art in a recording and editing process, of course there are beheadings that want the perfection of the work, but without realizing it when referring to Hindu aesthetics, these activities reduce the element of truth that occurs when the dancer dances the work in place, space and time. which are actually

### **III CLOSING**

The COVID-19 pandemic situation has had a major impact on the arts ecosystem in Bali where the entity and quality of the performing arts can no longer be fully enjoyed. A condition in which the totality of art changes in form and method of presentation. The virtual medium is a way in



which the artistic ecosystem is maintained as well as an anesthetic for the inner atmosphere of the artist to become more enthusiastic in facing a pandemic and as a support for the existence of art actors in accommodating all forms of creativity in their work. The reason for the health protocol gives a new color to the habit of performing art works such as the use of masks, face shields, and applying physical distancing in presenting characters in dance.

A new normal situation where virtual space as a medium in artistic imagery and creativity results in a degradation of the appearance and creativity of the artwork that is served. The image of traditional Balinese dance by complying with PROKES (health protocol) has an impact on; a) expressions that are not visible, b) the beauty of make-up cannot be enjoyed in full, c) the use of masks affects the wiraga aspect, because the dancer cannot breathe optimally, d) the addition and reduction of components of make-up and clothing interfere with the aspects of wirupa affects the integrity of the performance, e) The dancer does not feel the audience's response which usually creates energy for the dancer, and the use of virtual space as a virtual media has an impact where the purity of the work is questioned because of the more dominant role of technology in supporting the beauty of the artwork presented.

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# Yoga Asana Could Increase Faith and Immunity During the Covid-19 Pandemic

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## ABSTRACT

*Yoga* is one of the sports that involves both physical and psychological. Defining *yoga*, *Yoga Citta Vertti Nirodha*, means controlling the movements of the mind or the way to control people's mindset that tend to be wild. In facing global challenges, Hindus youths should be fortified by religious value, so they could understand and implement the religious teachings which are contained in the Hindu scriptures, as a reflection in society's life during the covid 19 pandemic. *Yoga Asana* is a very important thing to do as one of the ways to live healthy (immune) and spiritual (faith). Based on those thoughts, the article is presented. *Yoga Asana* could increase faith and immunity during the Covid -19 pandemic, because yoga asana is a perfect *sadhana*, which consists of *asana*, *pranayama*, and meditation techniques. During covid-19 pandemic, people must be able to do sports and exercise of breath and taste to increase faith and immunity. The conclusion in this article is that people are attracted to *yoga asana* for several reasons and backgrounds, such as (a) health (immunity), (b) self-control (faith), (c) spiritual. *Yoga Asana* is an activity that is connecting and unifying body and breath exercises and the concentration of mind to get faith and immunity. *Yoga* is a simple way to implement *Tattwa Jnana*, are advised to do contemplation by implementing *Asana-Pranayama-Pratyahara-Dharana-Dhyana-Yoga- Samadhi*.

*Keywords: Yoga Asana, Faith and Immunity, Covid-19 Pandemi*

## INTRODUCTION

### 1.1 Background

Yoga is a sport that involves both physical and psychological. Etymologically, the word yoga comes from the Sanskrit word *yuj*, which means to combine or relationship, namely a harmonious relationship with the object of yoga. In Patanjali yogasutra, Yogasutra (1: 2) Defines yoga as *Yoga*



*Citta Vertti Nirodha*. that is, controlling the mind, or a way to control the behavior of thought patterns that tend to be out of control.

Humans generally consist of two bodies, namely the physical body (physical) and the spiritual body (soul). Humans according to (Lontar, Maya Tatwa), consist of 3 (three) namely *setula sasira*, *suksma sarira* and *ananta sarira*, this will be explained as follows; The *stula sarira* is formed by the *panca maha bhuta* elements, *Suksma Sarira* or subtle body is the layer of the body which cannot be seen and touched, namely the human mind realm. The realm of the mind is located deep in the body so it is called the subtle body. The subtle body in Hinduism is called *Suksma Sarira*. and *Antakarana Sarira* is the most subtle body layer, namely Atman. *Antakarana Sarira* is also called the causative body. Atman is what animates humans so that they can live and be active ([1] Yudhiantara, 2009,).

[2] Pudja (1985: 51) describes humans as “*Manusiah iti manawah*”. The mind holds great importance in human life as revealed in the sacred scripture verse: 79 as follows:

*Kunang sanghiyang kesepanya, Manah nemitaning niscaya jnana, Dadi pwang niscaya jnana,  
Lumakas tang ma prawuti, Matangnyan manah ngaranika pradanan mangkana*

Meaning:

So in conclusion, it is the mind that determines if the determination of the feelings of the heart has occurred then people start saying, or doing actions, therefore think about which is the main source of it.

The mind (*manah*) is always close and integrates with the mind to produce culture and thoughts, including the mental part of humans (physical and spiritual) along with ratio and reason, a sense of health with apperception. In religious teachings, the *Yoga Asanas* exercise will be able to build faith and immunity during the Covid -19 pandemic

Talking about *Yoga Asanas* which involves physical and spiritual health and can increase faith and immunity during the Covid -19 pandemic as well as the creation of a universe that the aspects that the human body assesses in yoga practice are other elements in the physical (physical) spiritual (soul).

## DISCUSSION

### 2.1 Definition of yoga

([3] Suka Yasa et al, 2006: 5 - 6), etymologically the word yoga comes from the Sanskrit word *yuj*, which means connecting or relationship, namely a harmonious relationship with the object of yoga. But what does that mean? In the yogasutra verse, Yogasutra (1: 2) defines yoga “*Yoga Citta*



*Vertti Nirodha*”. that is, controlling the mind, or a way to control the behavior of thought patterns that tend to be out of control, biased, and captivated by a variety of objects, (which he imagines) gives pleasure.

[4] Sukra Darmayasa, 2013: 2, the word yoga is etymologically derived from the Sanskrit language, namely from the root word *yuj* which means connecting. In a broader sense, yoga means the relationship between the soul and the universal spirit called God (Brahmana). In this sense yoga is a way to achieve perfection, namely *Dharma* and *Moksa* by focusing on Ida Sang Hyang Widi Wasa (God Almighty), so that slowly it can free itself from worldly bonds.

#### **A. Yoga Asana for Self-Control (Faith)**

Self-control in terms of thinking wisely and prudently (faith), speaking and acting, so that everything leads to good. Self-control is controlling the mind and senses. ([5] Sura, 1985: 35).

*In Kartha Upanisad 1.3 it is mentioned; Atmanam rathinam viddhi, Sariram rathamtu, Budhim, tu sardem viddhi Manah prograham eva ca*

Meaning:

Know that the person is the master of the chariot, the body is the chariot. Know that wisdom is the charioteer and the mind is the bridle.

Self-control is the ability to control the senses and the movements of the mind that will bring salvation. If these senses can lead a person to a good cause. A person whose desires are not controlled, often acts without caring about the applicable rules in which he lives, the important thing is that his desires are centered (Suka Yasa, 2003: 11).

#### **B. Yoga Asana for Spiritual Health (Faith)**

Spiritual health is holy and pure consciousness, like the clarity of a clean mirror. This holy and pure consciousness is the consciousness that does not attach itself to anything ([5] Capra, 200: 84). To realize this statement of the soul with Brahman is through the yoga path which refers to the union of the individual soul with Brahman.

Yoga is the path of holiness to find, understand and experience oneness with Brahman. Spiritual awareness according to yoga is a way to realize the reality of a free soul, which is holy and pure. ([6] Sukayasa, 2006: 11).





### C. Yoga Asana for Improving Health (Immune)

Healthy is a condition that exists in the human body and develops. Actually, what is called healthy includes the whole human being, which includes physical, emotional, social and spiritual aspects.

According to Ayur Veda, to achieve a healthy life, humans must equip themselves to carry out Catur Purusa Arta.

1. Dharma, which is pursuing religious teachings in order to have virtue and truth.
2. Artha, which is collecting material in order to live a healthy and prosperous life.
3. Kama, which is learning to enjoy the natural desires of life.
4. Moksa, which is trying to live a happy, safe and peaceful life.

### 2.2. Benefits of Yoga Asana to get Faith and Immune

Yoga asana is an activity that connects and unites body exercise, breathing, and concentration of the mind to gain faith and immunity. ([7] Sarasvati, 2002: 3). Yoga asanas have physical, mental, and spiritual implications.

1. Physically practicing Yoga Asana on a regular basis will have a big impact on physical health.
2. Mentally Yoga Asana helps the mind to be strong and able to withstand pain and adversity.
3. Spiritually In yoga asana capable of forming human consciousness spiritually,

### 2.3 Yoga Increases Faith and Immunity during the Covid -19 Pandemic

Yoga is an activity that links physical, mental, and concentration movements to one center. Yoga activity itself consists of eight stages called *Astanga Yoga*. *Astanga Yoga* consists of eight parts, including: *Yama*, *Niyama*, *Asana*, *Pranayama*, *Pratyahara*, *Dharana*,

1. **Yama Brata** are five kinds of self-control, which consists of:  
*a. Ahimsa, (b) Satya, (c). Asteya, (b). Brahmacharya, (e). Aparigraha.*
2. **Niyama Brata**, *Niyama Brata* are five types of self-control to strengthen *Yama Brata*, consisting of:  
*a. Saucha, (b). Santosa, (c). Tapa, (d). Swadhyaya, (e). Iswarapranidhana, (f). Santosa, (g). Tapa, (h). Swadhyaya, (i) Iswarapranidhana*
3. **Asana**, the word asana means sitting posture, that is, sitting in a perfect posture: sitting according to the yoga system.
4. **Pranayama**, the word pranayama means breathing practice according to the yoga system;
5. **Pratyahara**, the word pratyahara is attracting the (*indria*) senses and their favorite objects,



6. **Dharana**, the word Dharana means the act of holding bringing, controlling, possessing, Concentration of mind "knot of mental power"
7. **Dhyana**, the word dyana means meditation, reflection, concentration of mind is also called contemplation or deep contemplation, "meaning the mind must be constantly concentrated on the object of contemplation"
8. **Samadhi**, means; deep contemplation is really Samadhi. "In only one luminous object the contained form is lost."

## CLOSING

### 3.1 Conclusion

*Yoga Asanas* have elements that provide teachings based on Vedic and literary ones, to gain spiritual awareness. According to yoga asana is a way of realizing the reality of a free soul, which is holy and pure, so that yoga asana can be said to be exercising, breathing and feeling during the Covid -19 pandemic and yoga asana will be able to increase faith and immunity during the Covid -19 pandemic.

- a. Yoga asana is a way of self-control (immunity). Self-control in terms of thinking wisely and prudently (faith), speaking and acting, so that everything goes in a good direction.
- b. Yoga asana is able to form intelligence or spiritual health as well as holy and pure consciousness, namely consciousness that does not attach itself to anything to achieve oneness with Brahman.

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# The Measurement of Quality Services at Jimbaran.stikom-bali.ac.id Website Using Webqual 4.0 Method

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## ABSTRACT

A website is one of the many media for communication that contains information in the form of text, sound, images, or video which can be accessed free of charge by the wider community. The problem of the level of satisfaction with the services of a website is very interesting to study in a study, because it relates to user satisfaction in accessing the website. Measurement of the quality of the website is done to find out how the quality of the website services Jimbaran.stikom-bali.ac.id belongs to ITB STIKOM Bali Jimbaran Campus. In this study the authors used the webqual 4.0 method with 3 variables, namely usability, information quality, interaction quality. Determination of samples or respondents using random sampling techniques. The sample of this research is 100 respondents who access / use this website which is taken randomly. From the results of data collection on 100 respondents who have answered questionnaires about the quality of the website, it can be concluded that the results of research that have been conducted by the majority of respondents agree with the quality of the website Jimbaran.stikom-bali.ac.id and the quality is very high. Based on the index value of the respondents' responses to all research variables, the quality results are very high. It is hoped that in the future this website will always be consistent as information related to high quality lecture information in presenting academic information to students.

*Keyword: measurement, quality, website, webqual 4.0.*

## 1. Introduction

Website is one of the services or information media or a collection of pages that displays information on text data, still or motion image data, animation data, sound, video and / or a



combination of all of them, both static and dynamic in nature which form a series of interconnected buildings where each linked by a network of pages[1]. The use of websites in education is very important to support academic affairs. The entire academic community will use the website to provide information to students in delivering information. The problem of the quality of website service is very important to be studied because it is related to the problem of the level of satisfaction of the website users itself. The website belonging to ITB STIKOM bali Jimbaran Campus has never been reviewed since the first time the website was created.

This study focuses on how the quality of the website [Jimbaran.stikom-bali.ac.id](http://Jimbaran.stikom-bali.ac.id) by using 3 research variables. In this study, the authors used the webqual 4.0 method. This method is used to measure the quality of the website based on the perceptions of the end user. Research on measuring the quality of websites has been carried out by many previous researchers. The results of the recommendations are used to improve the quality of the website. As research conducted by [2][3][4][5][6]. Research on website quality is conducted to measure the quality of a website's services. In conclusion, the researcher gave several suggestions, namely that the website manager should pay attention to how the website design is made, the content of the website design, and ease of use. The results of this study can provide input in the future in managing a website to provide lecture information.

According to WebQual 4.0 theory, there are three core dimensions that represent the quality of a website, namely usability, information quality and service interaction quality. The core qualities of WebQual come from the support of various primary and secondary literature which draws on research from three main areas namely:

1. Information quality

Derived from research on information systems. The questions developed in this section build on literature that focuses on the quality of information, data and systems.

2. Service Interaction Quality which comes from research on the quality of marketing services, e-commerce, and information systems.

3. Usability which comes from research in the field of Human Computer Interaction (HCI) or human and computer interaction and web usability[7].



## 2. Research Methods

This research is a descriptive study with a quantitative approach. According to Sugiyono in[8] Quantitative method is a method that can be used for surveys to obtain data that has occurred in the past or present about opinions, behavior, beliefs to test several hypotheses. This study uses survey techniques to obtain primary data by distributing questionnaires. Determination of samples or respondents using random sampling techniques. The sample of this research is 100 respondents who access/use this website which is taken randomly. The research can be seen on Figure 1 Website Quality Measurement Research Flow.

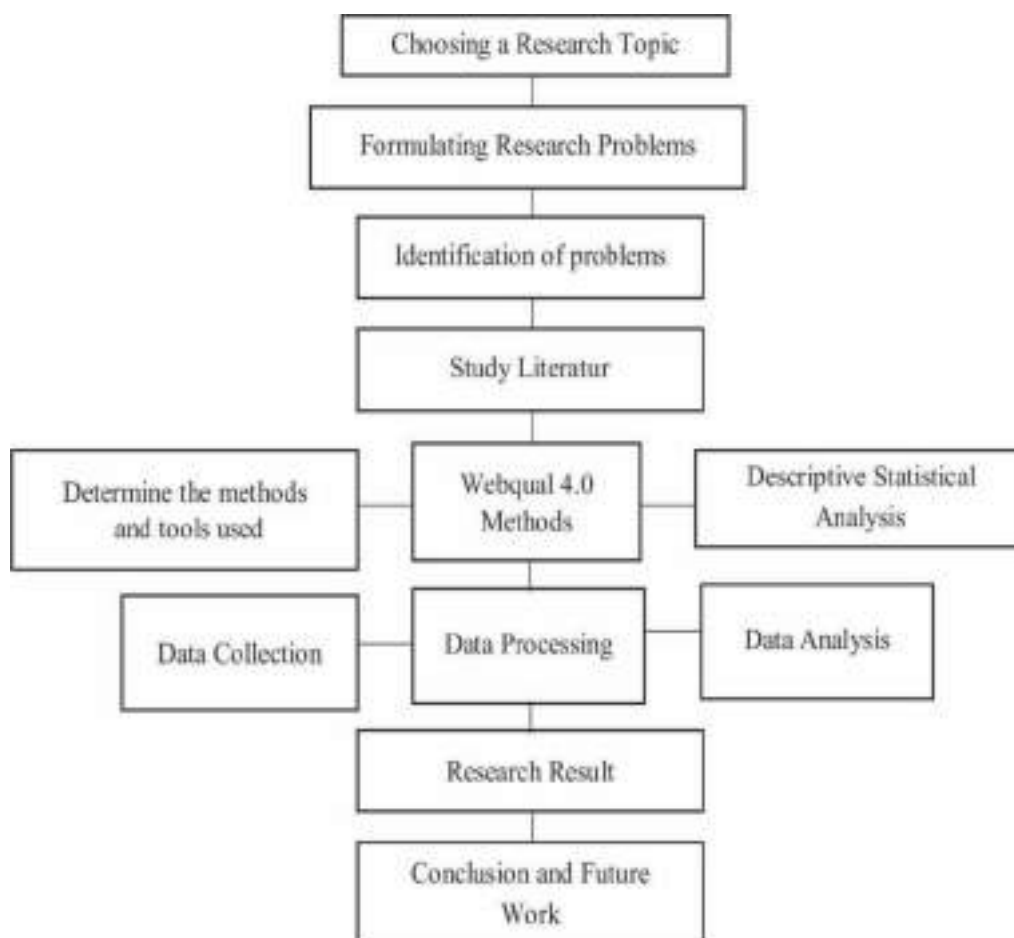


Figure 1 Website Quality Measurement Research Flow

This research conducted will measure the quality of the Jimbaran.stikom-bali.ac.id website from the perceptions of website users by using 21 research instruments from the Webqual 4.0 method. Webqual is a method used to measure the quality of a website based on the perceptions of the website's end users. In measuring the quality of the website, the webqual uses research instruments from three variables, namely usability quality, information quality and service quality.



Table 1 website quality measurement research instrument

Variabel	Code Statement	Statement
Usability	USA1	Users find it easy to learn to operate the websi
	USA2	User interaction with the website is clear and understandable.
	USA3	Users find it easy to navigate.
	USA4	Users find the website easy to use.
	USA5	website has an attractive appearance.
	USA6	design matches the type of website.
	USA7	website creates a positive experience for users.
Information Quality	IQ1	Provides accurate.
	IQ2	information Provides reliable.
	IQ3	information Provides timely.
	IQ4	Information relevant.
	IQ5	Provides Provides easy to understand information.
	IQ6	Provides information at the right level of detail.
	IQ7	Present information in the right format.
Interaction Quality	INQ1	The website has a good reputation.
	INQ2	Users feel safe to complete transactions.
	INQ3	Users feel secure with their personal information.
	INQ4	The website creates space for personalization.
	INQ5	The website provides space for the community.
	INQ6	Websites make it easy to communicate with organizations.
	INQ7	I feel confident that the goods/services will be delivered as promised.

Table 1 website quality measurement research instrument is the Webqual 4.0 instrument used in this study. There are 21 questions to measure the quality of the website (usability quality), (information quality), interaction quality)[9].

#### 1. General Description Of Research Respondents

According to Sutrisno, there are several pointers in sampling, namely; (1) generalization area; (2) affirmation of population characteristics; (3) sources of information about the population; (4)





sample size; and (5) sampling technique. The sample search by means of a census is carried out because there are relatively few population elements, the variability of each element is relatively high (heterogeneous) and to explain the characteristics of each element of a population.

The relationship between the sample and the population is that the analysis of the sample data produces sample statistics that are used to estimate the population meters. In addition, the parameter is a measure of numerical description calculated from the population measurement. Sample statistics are used to make inferences about population parameters[10].

Table 2 General Description Of Research Respondents

General Description Of Research Respondents Based On Gender	
Man	64
Women	36
General Description Of Research Respondents Based On Study Program	
S1- Information System	65 Person
S1- Computer System	35 Person

Based on Table 2 General Description Of Research Respondents, based on the results of the research questionnaire distributed to students that the number of male respondents was 64 people and female respondents were 36 people. Respondents based on the study program for S1-Information Systems as many as 65 people and S1-Computer Systems as many as 35 people.

## 2. Results and Discussion

### 1. Validity Test

The validity test of the quality of the website owned by ITB STIKOM Bali Kampus Jimbaran is calculated using the Correlation formula Pearson Product Moment. From the results of the correlation

between the item scores and the total score, the correlation value obtained is 21 items of valid statements

from questionnaires to students. This study uses usability variables, interaction quality, and information quality. Analysis of the validity test The number of samples (N) 30 with a significance level of 0.05, the obtained  $r\text{-table} = 0.349$ . From the calculation of the instrument validity test, 21



instruments were declared valid as the next measuring tool. The instrument is declared valid if  $r$  count statement  $> r$  table then it is declared valid as the next measuring tools[9].

Table 3 The Results Of The Usability Variable Validity Test

Table 3 The Results Of The Usability Variable Validity Test				
Variabel	Code Statement	N r Hit	N r Tabel	Information
Usability	USA1	0,534	0,196	Valid
	USA2	0,544	0,196	Valid
	USA3	0,711	0,196	Valid
	USA4	0,718	0,196	Valid
	USA5	0,760	0,196	Valid
	USA6	0,718	0,196	Valid
	USA7	0,558	0,196	Valid

Table 4 The Results Of The Information Quality Variable Validity Test

Variabel	Code Statement	N r Hit	N r Tabel	Information
Information Quality	IQ1	0,638	0,196	Valid
	IQ2	0,727	0,196	Valid
	IQ3	0,777	0,196	Valid
	IQ4	0,767	0,196	Valid
	IQ5	0,718	0,196	Valid
	IQ6	0,592	0,196	Valid
	IQ7	0,492	0,196	Valid

Table 5 The Results Of The Interaction Quality Variable Validity Test

Variabel	Code Statement	N r Hit	N r Tabel	Information
Interaction Quality	INQ1	0,638	0,196	Valid
	INQ2	0,727	0,196	Valid
	INQ3	0,777	0,196	Valid
	INQ4	0,767	0,196	Valid
	INQ5	0,718	0,196	Valid
	INQ6	0,592	0,196	Valid
	INQ7	0,492	0,196	Valid

## 2. Realibility Test

The reliability test is used to determine the consistency of measuring instruments that usually use a questionnaire (meaning whether the measuring instrument will get a consistent measurement if the measurement is repeated) [11]. If it is related to the Cronbach alpha requirement, the realibility value is perfect.



Table 6 Respondents Response Index According To Usability Variable.

Statement Code	Index	Criteria
USA1	78	High
USA2	78.5	High
USA3	79.25	High
USA4	80	High
USA5	80.25	High
USA6	80	High
USA7	78.75	High
<b>Total</b>	<b>79.25</b>	

Table 7 Respondents Response Index According To Information Quality Variable

Statement Code	Index	Criteria
IQ1	79.25	High
IQ2	81	High
IQ3	79.75	High
IQ4	79.5	High
IQ5	79	High
IQ6	78.25	High
IQ7	78.25	High
<b>Total</b>	<b>79.28</b>	

Table 8 Respondents Response Index According to the Interaction Quality Variable

Statement Code	Index	Criteria
INQ1	78.5	High
INQ2	77.75	High
INQ3	78.5	High
INQ4	79	High
INQ5	77.25	High
INQ6	78	High
INQ7	76.25	High
<b>Total</b>	<b>77.89</b>	

Based on the results of research that has been analyzed, it is found that, for the respondent index of the usability variable, it is 77.89 which states that the criteria for the usability variable are very high. The respondent index for the interaction quality variable is 79.28 which states that the criteria for the variable interaction quality are very high, and for the information quality variable it is 77.89 which states that the criteria are very high.



### 3. Conclusion

Regarding the measurement of quality Jimbaran.stikom-bali.ac.id website owned by ITB STIKOM Bali Jimbaran Campus, based on research results of very high quality. This is obtained by the results of the questionnaire test that shows good value by analyzing the variable indicators that have been done. From the results of the research that has been done, overall user satisfaction with the quality of website this is very high, it can be said that the end user is satisfied with the quality website. It is hoped that in the future the campus will be consistent in developing the website and updating all content and information presented so that students can see the latest information. For further research, it is expected that the number of respondents in this study will be increased. future research can add another method for comparison as a measure of the quality of the website.

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# Increased Ability to Conduct Interviews Through Assignment Methods

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## ABSTRACT

The discussion about interviews is indeed interesting to do. Interviews can be useful for students when they have to interview someone about a discussion. Interviews can also be useful when students want to obtain information in a study. Based on these sentences, the authors are interested in writing to improve interviewing skills through the assignment method. The assignment method given by educators can improve the ability to interview students. Students must be assigned an interview to improve their ability to conduct interviews. Educators who give assignments to improve interviewing skills can check the assignments given to students, after that if the task has to be fixed it must be corrected by students. In this way, the ability to conduct interviews from students can increase. This is because the training given to students increases the ability to conduct interviews of students. With this paper, it is hoped that it can develop theories related to interviews so that knowledge about interviews can develop. This research uses a qualitative approach with the type of library research (library research). The results showed that the ability to conduct interviews can be improved through the assignment method. Please educators to use the assignment method to improve the ability to conduct interviews of students so that this will also provide benefits for students.

*Keyword: Interview, Assignment Methods*



## **Introduction**

Humans use language in communicating. By using language, when people want to convey their meaning, they can be conveyed to the recipient of the message. By using language, human life will be smooth and good.

Language learning can be obtained by someone for example through schools and on campus. Language skills taught at school and on campus are reading, writing, speaking and listening. All these skills are taught so that students have an understanding of these language skills and can be used as provisions for their future lives in communicating with others.

Examples of learning about the language learned by students are for example interviews. An interview is a process of oral questioning between two or more people to find out someone's response and opinion to an object. In the past, in interviews there were meetings between two or more people directly. However, along with the sophistication of technology, interviews can be carried out using cell phones, etc.

The discussion about interviews is indeed interesting to do. Interviews can be useful for students when they have to interview someone about a discussion. Interviews can also be useful when students want to obtain information in a study. Based on these sentences, the authors are interested in writing to improve interviewing skills through the assignment method. The assignment method provided by educators can improve the ability to interview students. Students must be given an assignment in the form of an interview to improve their ability to do the interview. Educators who give assignments to improve interviewing skills can check the assignments given to students, after that if the task has to be fixed it must be corrected by students. In this way, the ability to conduct interviews from students can increase. This is because the training given to students increases the ability to conduct interviews of students. With this paper, it is hoped that it can develop theories related to interviews so that the knowledge of interviews can develop.

## **Research Methodology**

This research uses a qualitative approach with the type of library research (library research). Research with literature study is a type of research that produces a study based on the theory that has been discussed in the literature review. In this study the research resulted in this research based on the theory that has been discussed in the theory section. This is what causes this research to be called qualitative research with the type of literature study. The time of this research is from January to February 2021.





## Literature Review

### a. Learn

To discuss the assignment method, learning will be discussed, this is intended as part of the learning method assignment. By understanding learning, it will be easy to apply the assignment method. Learning is (a) trying to gain intelligence or knowledge, (b) practicing, (c) changing behavior or responses caused by experience [1].

From the understanding of learning described above, learning is a person's effort to gain intelligence, then learning can also be said to be an exercise activity. Then by learning, someone's behavior will change for the better. Next will be explained about the meaning of learning as follows:

- a) Hilgard in Sanjaya states that learning is a process of change through activities or training procedures both in the laboratory and in a natural environment [2].
- b) Learning is a process of a person's mental activity in interacting with their environment so as to produce positive behavior changes, both changes in knowledge, attitudes, and psychomotor aspects [2].
- c) Buston in the UNP MKDK Team stated that learning is a change in behavior between individuals and their environment [3].
- d) Sutikno in Fathurrohman and Sutikno states that learning is a process of effort made by a person to obtain a new change as a result of his own experience in interaction with his environment [4].
- e) Gadne in Saam states that learning is a change in behavior for the better [5].
- f) Whittaker in Aunurrahman states that learning is a process in which behavior is generated or changed through practice or experience [6].

Of the six opinions about learning above, learning is a change in behavior for the better. the change in behavior is due to the experience and training he has gained. The following will explain learning theories, namely:

- a) Cognitive Theory Cognitive theory explains a person's behavior which is determined by his perception or understanding of the situation related to his goals. Therefore, learning according to cognitivism is defined as changes in perception and understanding [6]. Gredler in Uno (with necessary edits) states that cognitive learning theory is a learning theory that is more concerned with the learning process than learning outcomes [7].



- b) Behavioristic Theory Learning according to this theory is a response to an existing stimulus. The response if trained will become a skill. For example, someone who is trained to have teaching skills, if trained on an ongoing basis, that person will have teaching skills.
- c) Humanistic Theory In humanistic theory, educators must treat their students well. That way, students will be able to learn well. If students learn well, their learning outcomes will also be good.

Uno (with edits as necessary) states that the five principles of learning are

- a) Recognize very well what is attractive to us. If we know very well what really interests us, it will certainly be easier to find a variety of important information that we are going to learn.
- b) Know your own personality. If we really know who we are and what we want, then learning something that suits our desires and personality becomes easier to do.
- c) Record all information in words. The easiest and wisest step is if we record all the information by rewriting it in any form.
- d) Studying with other people. The easiest way to truly learn is when we do it together.
- e) Respect yourself. Learning to understand and absorb information will feel more useful and meaningful if we appreciate it [7].

## **b. Assignment Method**

After discussing the concept of learning, it will be conveyed about the assignment method. The assignment method (assignment method) is a way of teaching with planning activities between students and teachers regarding a subject that must be completed by students within a certain agreed time [8].

Then the assignment method is a way of presenting the lesson material. In this method the teacher provides a set of tasks that must be done by students, both individually and in groups [9].

At the time of its implementation the assignment method has its peculiarities [10]. Furthermore, the assignment method is a way of giving assignments to students [11]. Based on the two opinions above, the assignment method is a way of teaching by giving assignments that must be done by students. The assignment method must be designed properly by the teacher so that the results can also be as expected.



### **c. Interview**

An interview is a process of oral questioning between two or more people to find out someone's response and opinion to an object. In the past, in interviews there were meetings between two or more people directly. However, along with the sophistication of technology, interviews can be carried out using cell phones, etc. Therefore we can conclude that the interview is a question and answer process between two or more people who discuss something [12]. Then the interview is a question and answer between two parties, namely interviewers and sources to obtain data [13].

An interview is a conversation conducted by two parties, namely the interviewer (interviewer) who asks the question and the interviewee (interviewee) who provides answers to the question [14]. Then Benney and Hughes (in Denzin) stated that an interview is a meeting of two humans who interact with each other within a certain period of time [15]. Then the interview is the most appropriate technique to reveal the personal situation of the interview subject [16].

Based on some of the explanations above, the interview is an oral question and answer process between two or more people to find out someone's response and opinion to an object. The interview is the most appropriate way to reveal the personal circumstances of the interviewee.

### **Result and Discussion**

The research results indicate that the ability to conduct interviews can be improved through the assignment method. Please educators to use the assignment method to improve the ability to conduct interviews of students so that this will also provide benefits for students. Based on the explanation above, a study entitled Increasing the Ability to Conduct Interviews through the Assignment Method will be conducted In giving assignments to students, the teacher must also consider the number of assignments given to students.

This is intended so that the participants in addition to doing the assignments given by the teacher, students also have time to sleep enough. This is so that the education process carried out by the school can be properly implemented.

When students conduct interviews using the assignment method, this will further develop the abilities of students. With the training method, students will be trained in their ability to conduct interviews. This is what makes the ability of interviewing students increase.

After students collect the assignment given by the educator. Educators can check the assignments assigned to him. Then check and be able to find out about the progress of the level of



knowledge possessed by the educator. This is what is called the application of the assignment method to increase interviewing abilities.

When educators use the assignment method automatically the abilities of their students will increase in the interview material. This is why teachers can use the assignment method when teaching students about interview material.

## **Conclusion**

The results of the study indicate that the ability to conduct interviews can be improved through the assignment method. Please educators to use the assignment method to improve the ability to conduct interviews of students so that this will also provide benefits for students. Based on the explanation above, a study entitled Increasing the Ability to Conduct Interviews through the Assignment Method will be carried out

## **Suggestions**

The following suggestions are given in this study, namely

- 1) Educators must understand interviews well
- 2) Educators must understand the method of assignment
- 3) Please educators read some journals regarding interviews
- 4) Please educators read several journals regarding the method of assignment
- 5) Please educators to use the assignment method to improve the ability to conduct interviews of students so that this will also provide benefits for students

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# **Srsti in Arts A Dimension in Generating the Spirit in the Pandemic Time**

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## **ABSTRACT**

The Covid 19 pandemic that has hit the world has resulted in anxiety, especially in Bali. Stunted cultural activities create anxiety for art actors in the archipelago, especially in Bali. Responding to the pandemic problem, it is necessary to have a deep contemplation for the actors of the arts in order to remain enthusiastic in responding to the situation. The problem here is a) How can humans survive and rise in a pandemic situation that undermines all forms of human activity. b) What is the method of understanding Srsti in generating energy in the body. This paper uses the Shiva Purana text approach by using unconventional theory (Hilgard) regarding the emergence of superior thought processes that occur in humans to increase efficiency and human creativity as a surgical knife. This paper is expected to be able to provide motivation in the awareness of the importance of arousing creativity which refers to the understanding of Srsti in the Hindu concept in order to harmonize economic conditions, health and other inequalities. Increased efficiency and human creativity are sanctified with the script "Ong Kara Linggodbhawa".

*Keywords: Srsti, Art, Rise*

## **I INTRODUCTION**

Art as an expression of a sense of beauty is one of the universal human needs. It does not only belong to the rich or the self-sufficient, but also to the needs of the poor, or those who live along the lines of difficulties. A number of sources show that art in Bali has developed well. In the inscriptions of Anak Wungsu era, for example, various terms are found such as: pamukul, pagending, papadaha (related to the art of music), roofing, parbhangsi, abanwal, menmen, aringgit (related to dance, theater and wayang), and others. provides variations in the arts of music, dance and theater that existed in Bali around the X century. The description of Balinese artistic life at that time, especially in the field of music, was further clarified by the discovery of the terms: calung, galunggung (petung), and



salunding. related to the art of music, in the Buwahan and Bulihan inscriptions (Dibia I Wayan: 2012). However, in line with the development of art in Bali, it is experiencing anxiety due to the Covid 19 pandemic that has hit the world. Cultural activities are hampered due to the appeal issued by the government to reduce activity in large numbers or the public. This has caused anxiety for art actors in the archipelago, especially in Bali.

Then the central government began issuing the Newnormal Era policy which was used for a new order in the recovery period due to the impact of the corona pandemic, as a form of new order behavior that followed PROKES (health protocol). This pandemic has not only cut off the world of tourism, but the artistic tradition involved in community activities in Bali has also suffered an unfavorable impact. This condition has an impact, one of which is for art actors where all forms of artistic activity and creativity are limited. Responding to the pandemic problem, it is necessary to have a deep contemplation for the actors of the arts in order to remain enthusiastic about the situation. Becoming a creative person (Srsti) is one form of action so that humans, in this case art actors, can rise from adversity in a pandemic situation that is eating away at human activities.

Furthermore, so that there are no different interpretations, the understanding of Srsti will be discussed which is obtained from a literature review which discusses the problem of the relationship between Srsti and various aspects of life, such as psychology, intelligence, abilities, social relationships, relationships, and emotional stability, which is very interesting. to be used as study material, namely the aspect of freedom of thought and acting as a characteristic of creative people (Srsti).

## **II Method and Theory Basis**

According to the large Indonesian dictionary (2005: 599), creativity is the ability to create things to be creative and creative. According to James.J Gollagher in Yeni Rahmawati (2005: 15) states that creativity is a mental process by which on individual crates new ideas or product or recombines existing ideas and product in fashion that is novel to the him or her (creativity is a process mentally done by the individual in the form of a new idea or product or a combination of the two which will eventually stick to him). Creativity in the ability to create or inventiveness (Kamus Besar Bahasa Indonesia 1990:456) creativity can also mean the latest and original creations created, because creativity is a unique mental process to produce something new, different and original. creativity is an organized and comprehensive, imaginative brain activity leading to original results.





According to Clark Moustakis (1967), a humanistic psychological expert states that creativity is the experience of expressing and actualizing individual identities in an integrated form in relation to oneself, nature and others.

Rhodes emphasized that creativity is generally defined as person, process, press, product. These four P's are interrelated, namely the creative person who involves oneself in the creative process and with encouragement (Press) and support from the environment to produce creative products. This theory is used to dissect the understanding of Srsti in the study of shiva purana which is believed to have supra- empirical power that can be used by humans (Hindus in Bali) to solve their life problems. A symbol is a thing or a state that is the means of understanding an object. In terms of belief in religion, it is seen that it cannot be concrete. So all efforts to do so are merely approximate estimates presented by means of symbols. Etymologically the symbol is taken from the Greek verb, *sumbello* (*sumballein*) which means to interview, contemplate, compare, meet, throw together, unite (Dibyasuharda in triguna, 2000: 7) symbol is the union of two things into one.

Symbols have no physical or substantial reality but have only functional value. The symbol only lives as long as the symbol has meaning for a large group of humans, as something that contains common property so that the symbol becomes a living social symbol and its influence is alive (Triguna, 2000: 8-10).

Based on the ranking of the symbols, they are grouped into four, namely 1. a symbol of construction in the form of belief and usually the essence of religion, 2. a symbol of evaluation in the form of a moral judgment that is loaded with values, norms, and rules, 3. a symbol of cognition in the form of knowledge that is used by humans for acquire knowledge of reality and order so that humans better understand their environment, 4. symbol of expression in the form of expressing feelings. Almost all symbols are shared values, which are mutually agreed upon and have an integrative function to maintain togetherness in society; or vice versa that can create disintegrative (Triguna, 2000: 35).

Related to the Linggodbhawa script, this theory is used to dissect the Linggodbhawa script from its state of being as a symbol of the highest peak in the attainment of Srsti in the study of Siwa Purana.

### **III. DISCUSSION**

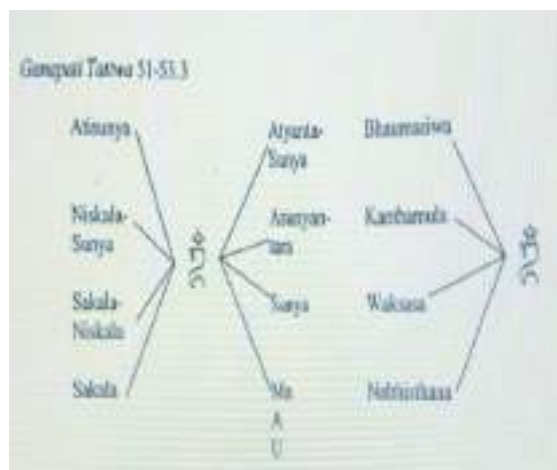
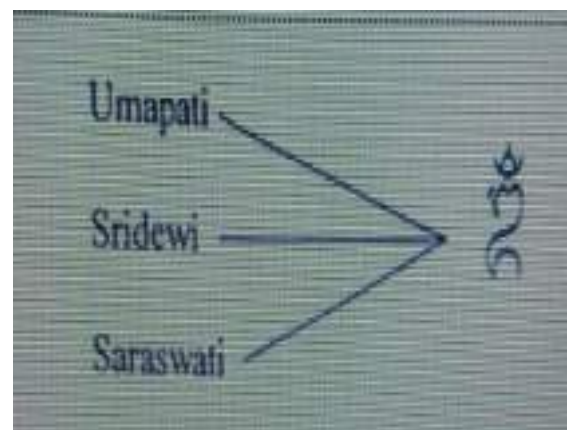
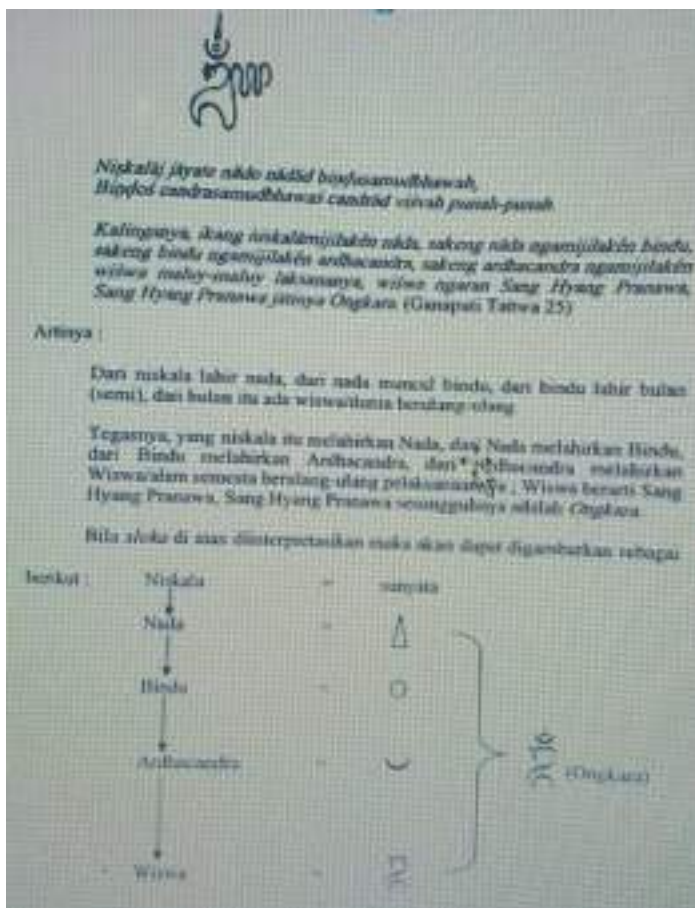
#### **a. Understanding Srsti**

Based on the Old Javanese Indonesian dictionary (1978) Srsti means: creation, occurrence, creation, creativity. Creativity in this case refers to intelligence, intelligence, one's ability to create or



discover new things, new relationships, the process of achieving new ways of solving life's problems, new creations to produce new objects or forms. , as well as the agility of people thinking. There are also those who associate the word Srsti / creativity with unconventional terms, the emergence of superior thought processes that occur in humans to increase efficiency, and human creativity that is different from other humans in general. The level of human intelligence is not the main characteristic of a creative person. The correlation between the level of intelligence and creativity according to Barron (in cultural analysis, 1980) is very small, but the variables that determine creativity are personality and emotions.

Creativity in the Hindu concept is the result of the consecration of Citta and Wicitra which is then referred to as Srsti which is the achievement of new objects or forms with the power of "Ong KaraLinggodbhawa which looks like this:



Sang Hyang Pranawajnana, kamoksen (Ganapati Tattwa 51-53.1)



This understanding is a process of brilliance from human creativity equivalent to the creation of the sounds of the supreme Mahakawya and Pranawa (Vina Heaven's Voice). The gift of knowledge from the highest notes, and then complete atmajnana. Cit-Ananda (truth, knowledge, absolute bliss).

### **b. Some of the Abilities of Creative People**

Guilford (1963) says that when research uses factor analysis, the following traits emerge as important factors in planning and creative abilities. These characteristics are as follows:

1. Fluency: Agility, fluency, and the ability to generate lots of ideas.
2. Flexibility: The ability to use a variety of approaches in solving problems.
3. Originality: The ability to come up with original ideas.
4. Elaboration: The ability to do things in detail.
5. Redefinition: The ability to formulate boundaries by looking at it from another angle rather than from the usual ways.

This creative ability can also be found in the understanding of the Five Brahma in Tatwa Brahma Sankalpa, namely the Five Processes of Shiva's creativity in the creation of Bhuana Agung and Bhuana Alit whose positions are strengthened by Balinese sacred characters.

The position, linggih or sthana of the holy script from the Five Brahma in the human body (bhuana alit) as a formation of the process of creation, including:

1. Sadyojata (Sang Hyang Iswara) with wianjana characters: Sa (Sang)
2. Bamadewa (Sang Hyang Brahma) in wianjana script: Ba (Bang)
3. Tat Purusha (Sang Hyang Mahadeva) in wianjana script: Ta (Tang)
4. Aghora (Sang Hyang Wisnu) with voice characters (vocal): A (Ang)
5. Isana (Sang Hyang Siwa) with voice aksra (vocal): I (Ing)

In Mahayana Buddhism, Five Brahma / Gods are called Panca Tatagata, which consists of: Aksobhya (Ah), Ratnasambhawa (Ung), Amitaba (Trang), Amogasidhi (Hrih), and Wairocana (Ang)

### **c. Art**

In fact, art as an expression of a sense of beauty is one of the universal human needs, the question arises what is meant by art. In general, every human activity can be said to contain aesthetic value or the value of beauty even though it does not necessarily cause admiration.

Boss (in cultural analysis) reaches the limits of the arts as something that can evoke pleasurable sensations. An activity will generate a feeling of beauty if it is carried out by fulfilling certain



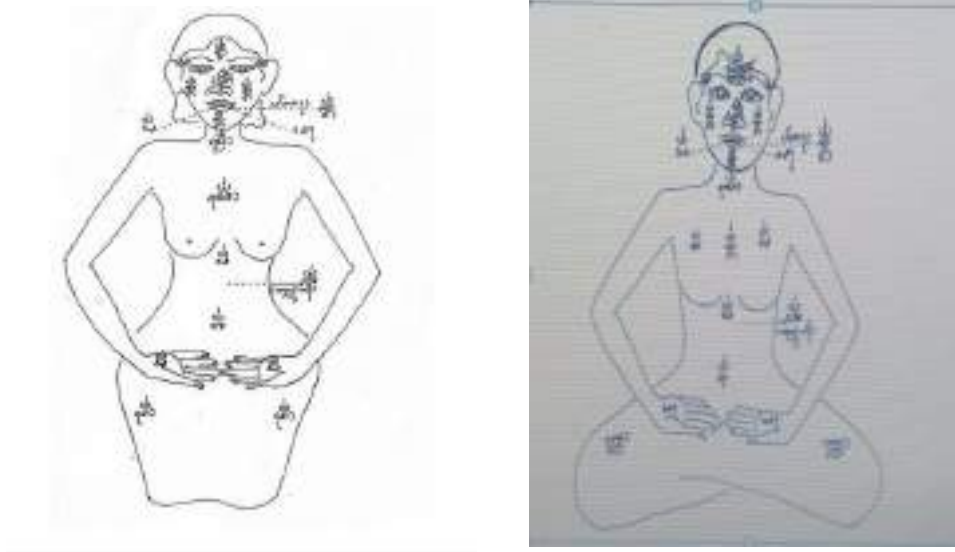
technical requirements in the process so as to achieve a standard of excellence. In other words, art can be interpreted as a decoration of everyday life that is achieved with certain abilities and has forms that can be described by its supporters and can be a manifestation of all impulses that pursue beauty and therefore can increase pleasure in all stages of life (Budhisantoso, 1982 : 14)

The above understanding gives the idea that there are at least two aspects of art that need to be considered, namely the aesthetic context or its presentation which includes forms and skills that give birth to style. And the context of the meaning (meaning) which includes the message and the relation of the symbols. It is in these two aspects that this description should be concentrated because it is impossible to talk about the expression of feelings and ideas by satisfying a sense of beauty without paying attention to form and meaning. Apart from that, it is impossible to talk about art without paying attention to the messages contained symbolically, besides the art activities themselves as a manifestation of the functionalization of a cultural subsystem.

#### **d. Rise During the Covid Pandemic 19**

Bali, whose majority is Hindu, with its arts, culture and customs that have noble values is the center or center of the development of the noble Hindu religion of the archipelago. In this case the community and especially Balinese leaders must be able to assume responsibility and face all challenges. In order to maintain and develop Bali as the center of Hinduism and the inheritance of the noble culture of the archipelago, especially in the situation of the COVID-19 pandemic, we must remain enthusiastic in creativity in all fields, especially in the arts and culture. The challenges and responsibilities of the community and Balinese leaders in this regard are:

1. Improve self-quality in achieving the Essence of Arts by generating ways of thinking and creativity to create works of art even in times of economic, health and other downturns. Therefore, it is necessary to cultivate a sense of creativity that comes from Balinese Hindu literature through a process of creating works based on Brahma Sangkalpa which will later strengthen Citta Srsti Sakti. The understanding of Citta Srsti Sakti is to turn on the literary powers that exist in the human body (Buana Alit). The diagram of literary power in the human body (Bhuana Alit) is as follows: Body Tattoo For Women



Body Tattoo For Men

**Source: Ida Pedanda Gede Ngurah**

By living the power of the holy script through yoga asana, it can strengthen the creativity and immunity of the body. In addition to the power of the sacred script, in the Hindu concept it is also emphasized to stabilize the gods in several parts of the body which are considered to provide the power of taksu or charisma and highest intelligence of Parama Widya, including:

- a. Sang Hyang Uma put it on the crown
- b. Sang Hyang Timira put it on the forehead.
- c. Sang Hyang Surya distributed it in both eyes d. Sang Hyang Mercukunda in both ears.
- e. Sang Hyang Angkara on the nose f. Sang Hyang Wasu on the mouth
- g. Sang Hyang Yamadipati was put on the neck h. Sang Hyang Udaka is put on the chest
- i. Sang Hyang Kalarawu on the right hand j. Sang Hyang Mahayekti on the left hand
- k. Sang Hyang Ketu distanakan at the end of the heart l. Sang Hyang Kawitan on right milk
- m. Sang Hyang Kursika on the left milk n. Sang Kurusya on the stomach
- o. Sang Hyang Dharma on the navel
- p. Sang Hyang Kala Mertyu on genitals q. Sang Hynag Nini Bagawati on pantad r. Sang Hyang Sri among the pantads
- s. Sang Hyang Kama Jaya on the spine
- t. Sang Hyang Gana on both legs and so on



2. Continuously and systematically improve the quality of sradha and devotional service as well as the ability of the Balinese Hindu community to fully explore Hinduism including tatwa, Balinese Hindu ceremonial morals proportionally.
3. Developing community inspiration and motivation to keep working and not being shackled by circumstances, building human resources who are moral, knowledgeable, and ready to do devotional deeds (ethics, widya, dharma sewaka)

#### **IV. CLOSING**

Srsti or creativity is a process of expression that will give birth to an innovation. This innovation is also referred to as unconventional, the emergence of superior thinking processes that occur in humans to increase human efficiency, and human creativity. Srsti's achievement in the Hindu concept is rooted in sacred literature which is reflected in the symbol of power "Ong Kara Linggodbhawa"

The downturn in the economy, health and others during the Covid 19 pandemic, made Balinese people and even the world lose everything. In order to harmonize this situation, it is necessary to improve the quality of oneself in achieving Srsti by arousing ways of thinking and creativity. With high creativity, Sad Guna Maha Widya will come up with brilliant ideas.

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# Cultural Dynamics in Response Of Covid-19 in Bali

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## ABSTRACT

The outbreak of the Covid-19 Virus has severely damaged the joints of the world economy today. Slowly, the cultural foundations whose survival has become a dynamic struggle in Balinese society, namely Adat, Culture, and Religion, have become an inseparable breath for Balinese people. The issuance of the social distancing appeal has a direct impact on the traditional and religious activities of the Balinese people. The synergy between institutions, the inclusion of knowledge of local wisdom that is random, which originates from Hindu religious literature, is a peaceful way that the provincial government of Bali has taken to end the spread of the virus. As taught by previous Balinese ancestors, pandemic is traditionally understood as a sign of natural imbalance due to human activity: The disharmony of *bhuana alit* (microcosmic) with *bhuana agung* (macrocosmic). With this point of view, the plague is faced with *mulat sarira* (self-examination), *nunas ampura* (asking for forgiveness), ducking without arrogance, weighing cosmic imbalances in deep silence, as well as being open to the idea of a *sekala -niskala* breakthrough. The emergence of these traditions is an example of the ancestors in dealing with the plague. But to find a path of success in handling the epidemic, debates, struggles, contestations and even conflicts will occur. This also means that a step concerning the good for the masses (general) must go through such a long cultural dynamic to find a clear path to the new normal era.

*Keywords: Dynamics, culture, covid-19*

## Preliminary

### A. Background

At the end of 2019 the world was disturbed by the emergence of cases of death due to respiratory failure and pneumonia which were said to be caused by a mysterious virus such as the SARS virus. This virus first appeared in Wuhan City, Hubei Province - China. The massive spread of the virus in the city of Wuhan received a response from the world health agency (WHO) through





an official announcement on January 30, 2020 which contained a statement that the world had been hit by a new type of Corona virus pandemic known as the Corona Disease 19 Virus or more popularly with the abbreviation Covid-19 (Agus Purwanto, 2020: v). It didn't take long, Covid-19 spread to various countries in the world, until April 6, 2020, more than 200 countries had reported cases of Covid-19 (Dzulfaroh, Kompas.com.App. 6 April 2020). Positive confirmed infections totaled 3,822,382, while died 263,658 (<https://covid19.go.id/>, accessed on 9 May 2020. At 22:13).

Indonesia initially felt confident enough, even rumors often circulated that "Indonesian are immune to the Covid-19 virus". But the reality has turned around since the announcement of the first Covid-19 case by President Joko Widodo and Minister of Health Terawan Agus Putranto on March 2, 2020, this virus continues to spread in 34 provinces with 13,645 positive patients as of May 9, 2,607 recovered and 959 people died: [//covid19.go.id/](https://covid19.go.id/), accessed on 9 May 2020. At 22:13). Meanwhile, Bali until 9 May 2020 reported that there were 306 cumulative positive cases of Covid-19. With the number of cures reaching 65% or 197 patients. Meanwhile, 4 people died (Kompas.com).

Efforts to contain the spread of Covid-19 in Bali were carried out by issuing the Bali governor's appeal regarding social distancing. The essence of the appeal is prohibited from conducting mass gathering, reducing activities outside the home, maintaining distance, working at home and studying at home. Another appeal is to eliminate traditional and religious activities that involve mass gathering. Not a few traditional and religious activities that invite the arrival of the period to be canceled or postponed, such as marriage activities. Likewise, religious activities such as piodalan are carried out by appointed officers (village stakeholders and administrators), while the prayers are carried out in rotation.

### **A. Indigenous Dimensions**

For the smooth running of the Bali governor's appeal regarding social distancing, the involvement of traditional institutions, such as the Bali Provincial Traditional Village Council (MDA) and Religious Institutions (PHDI) is always carried out. The synergy effort to break the chain of the spread of Covid-19 in Bali is contained in a Joint Circular Number: 510 / Kesra / B.Pem.Kesra Number: 019 / PHDI-Bali / III / 2020 and Number 019 / MDA-Prov. Bali / III / 2020 regarding the implementation of the Nyepi holy day in Saka 1442 in Bali. In addition to this circular, there is also an appeal letter from the Governor of Bali I Wayan Koster as head of the Covid-19 handling task force No. 45 / satgascovid19 / III / 2020 reported that the spread of Covid-19 virus was increasingly widespread, so on March 26, 2020, to coincide with the fasting, the Balinese people were encouraged



to remain at home (<https://jarrakpos.com>; [https://www.cnnindonesia.com / national](https://www.cnnindonesia.com/national), accessed May 9, 2020).

All Traditional Villages in Bali are following the call. However, not a few questioned this decision, which considered it contrary to President Joko Widodo's appeal, who at that time had not agreed to a lockdown or lockdown. Chaos or protests against the regional quarantine model occurred by one of the Facebook accounts on social media. Other dynamics related to customs and religion in handling the Covid-19 virus emerged through a circular sent by each of the traditional banjars with number: letter 472/1621 / PPDA / DPMA regarding the ceremony "*Nunas ica* Mercy" or it can be interpreted as asking for mutual happiness. In a circular signed by the Head of the Bali Provincial Indigenous Community Advancement Service, IGAK Kartika Jaya Seputra, dated April 2, 2020, at that point, the residents are asked to provide a complete list of chopped rice complete with a jati containing bungkak ivory (Artayasa, [https://www.balipuspanews .com](https://www.balipuspanews.com), accessed May 9, 2020). The letter was the result of a meeting between the PHDI institution and the Bali Province Traditional Village Council (MDA) which emphasized the Hindu community in Bali on Thursday, April 2 evening simultaneously carrying out the ritual in front of the house (*lebuah umah*). humans and the world, so that the Covid-19 virus outbreak which has killed hundreds of thousands of people will soon disappear from this earth.

### **A. Cultural Dimensions**

Bali is an art-based tourist spot. Art becomes a performance that is quite attractive for tourists to enjoy, especially like dance, so that with the development of tourism in Bali, it is enough to boost the development of art in Bali on a tourist basis, in its development it is often staged to be entertainment for tourists. Balinese dance is one of the many artistic cultural heritages that still exist in Bali, especially in Indonesia, which has a unique character in terms of its appearance. However, when the Covid-19 Pandemic appeared, it had a huge impact on Balinese people, including artists who only rely on their lives from their artistic services and do not have a fixed salary. Since the covid 19 pandemic, it has indeed paralyzed almost all activities. Artists who are accustomed to activities outside the home are forced to stay at home because they follow government regulations for social distancing. This situation certainly made their condition difficult. They have to rack their brains, of course it will make their condition easier so that they can continue to be arts and be able to earn a living to fulfill their daily needs. Therefore, the artists must be willing to think creatively and innovatively. For example, using social media to take advantage of the creativity and skills he already



has by holding an online performance or training on social media. Apart from that, music artists, singers, and especially dance artists who have been accustomed to performing on stage so far can switch to the virtual world by holding live shows online. All of this isn't easy to do, but it's worth a try. For example, making promotional performances through social media (social media). For anyone who intends to watch a show, the audience must pay online. Viewers who have registered will be included in a specially created social media group. So only those who have paid can watch the live show. Unfortunately, not all artists are able to solve their life problems. More artists, especially older artists, reside in remote and helpless rural areas.

### **A. Dimensions of Religion**

Another discourse that is no less shocking is the pros and cons related to the discourse on the implementation of *Nyepi Sipeng Eka Brata Panyepian*. *Nyepi Sipeng* is planned to be held on April 18, 19 and 20, 2020. *Nyepi Sipeng* for three days was discussed by the Traditional Village Council (MDA) and PHDI Bali which was recognized by the Governor of Bali (<https://bali.tribunnews.com>, access 9 May 2020). The pros and cons of this discourse, although in the end it was not carried out or officially canceled through a press conference at the PHDI Bali office. According to the Chairperson of the MDA-Bali Province, *Ida Panglingsir Agung Putra Sukahet*, the discourse on *Nyepi Sipeng* was only a plan. It is not enough for the discourse of *Nyepi Sipeng*, the latest uproar is about the *Ngaben* ceremony in the traditional village of Sudaji Buleleng, even though in the end an apology for not gathering people in the *Ngaben* activity was carried out by the traditional Sudaji village.

The latest appeal for the handling of the Covid-19 virus in Bali occurred again on May 5, 2020 by the chairman of PHDI Bali Province. PHDI appealed to Hindus to line up *pejati* on *pelelingih merajan* or refute *kemulan* by adding the *tridatu* thread on top of the *pejati daksina*, then the tri datu thread was used as a bracelet. The purpose of this appeal is to ask for protection and to be kept away from the Covid 19 epidemic to the *Bhatara Kemulan (Bhatara Guru)*. Starting from the discourse on the involvement of customs and religions in handling the Covid-19 Virus by the Bali provincial government, there are several important things that are the focus of analysis in this paper.

The use of religion by the Bali provincial government as ideological truth is a disciplinary step aimed at supporting the call for social distancing, even if possible, it can eliminate the spread of the Covid-19 virus. Religion and customs in Bali are two phenomena in one reality (Geria, 2008), there is no implementation of Hinduism without traditional features and on the contrary, custom can



always develop because it is imbued with Hinduism. Gayut with the opinion of Aziz (2006: 186-187) in the context of religious life in Bali, what is called a religious symbol can include things related to aspects of life that have been given religious nuances such as those related to customs that are difficult to separate from religion. such as a traditional village complete with temple equipment, studio, banjar, awig-awig and so on. This is where religion in Bali finds its strength and power to put pressure on the Balinese people.

The involvement of religion in efforts to deal with the virus shows the role of religion in facing life's challenges, one of which is disease outbreaks. In the context of religious truth, disease originates from evil forces that are invisible, prevention is carried out by driving away evil forces (Agus, 2007: 267). The occult method of expulsion in Bali is called the noxious method. Sukaarjawa (Balipost, 25 April 2020) argues that the abstract method cannot even be negotiated, because it is absolute. For example, the implementation of a ceremony to shade the universe with the aim of saving, calming and cooling the earth (not just Indonesia) from all dangers, in this context avoiding the Covid-19 outbreak that hit the world. In addition to the shade of the universe, there are still many other rites as appealed by the local government of Bali through the Covid-19 task force in collaboration with PHDI and MDA. Like giving wong-wongan rice, nyipeng, nyejer daksina. It is possible that new traditions will continue to emerge by utilizing religious ideology in handling the spread of the Covid-19 virus. This fact is also echoed by Sugi Lanus' analysis with the title "Plague and the Emergence of New Traditions in Bali" which states that when the plague hit Bali in the past, *sanghyang*, *rejang*, *gandrung*, and other dances emerged. These sacred dances "descend" in various villages through abstract "guidance" as part of the epidemic prevention. Plague has traditionally been understood as a sign of a natural imbalance caused by man: The disharmony of *bhuana alit* (microcosmic) and *bhuana agung* (macrocosmic). With this point of view, the plague is faced with *mulat sarira* (self-examination), *nunas ampura* (asking for forgiveness), ducking without arrogance, weighing cosmic imbalances in deep silence, as well as being open to the idea of a scale-through breakthrough. The emergence of these traditions is an example of the ancestors in dealing with the plague (Balipost, 14 April 2020).

#### **D. Public Policy**

The dynamic situation faced by Bali regarding the Covid-19 disease has made the Bali Provincial Government consider allocating a budget to prevent the Covid-19 disease. It should focus on monitoring programs and also the budget used by the government in handling the Corona or Covid



19 pandemic rather than forming its own Task Force. The DPR-formed Covid-19 Task Force, which is claimed not to use the institutional budget, also raised suspicions. The public may be confused about whether this Task Force is an official tool of the Institute or some kind of voluntary member initiative.

Given that the DPR is an institution with great authority. Large authority if not used properly will give birth to irregularities. Previously, many cases of corruption involving DPR members were born from deviations from the positions of members taking advantage of the large institutional power. There will be many loopholes that allow deviant practices to occur. Moreover, as a supervisory institution, no one has a higher power that allows the DPR's contributions to be monitored.

The DPR should have trusted the government to become the executor of the covid 19 handling programs. Meanwhile, for DPR members who wish to donate certain money or materials for handling Covid 19, they should collect it and then submit it to the government task force to distribute it. Optimizing the use of the Regional Revenue and Expenditure Budget (APBD) so that it can be used to anticipate and handle the impact of Covid-19 transmission for the needs of regional hospitals. Previously, the Indonesian Parliament formed a task force (task force) against Covid-19 which functioned to assist the government in accelerating the handling of the spread of the Corona virus in each area.

When the situation is difficult due to the Covid-19 pandemic, what the people really need is concrete government assistance, not a set of regulations with irrelevant urgency that are considered to be a new threat to the people. It is interesting to see the extent of the realization of the sensitivity of the two institutions of power.

### **A. Commodity Dimensions**

In addition to the problematic constellation with a focus on commodities, recently PMI from Bali has received a lot of bad stigma because it is seen as being able to spread the Corona virus in its place. The stigma is very regrettable because in fact not all PMIs have the potential to spread the virus. However, as a community (social groups that have the same identity), fellow PMIs must be able to remove the stigma through their "struggle". This "struggle" is nothing but an effort to prove that not all PMI carry the virus when they return home, by voluntarily quarantining and having themselves checked. The government has indeed made a policy to quarantine, but there are always those who pass. Indeed, there is data that states that the rapid increase in the number of community members who are positive for the Corona virus occurred after this PMI wave came from abroad. And



it was then suspected that triggered the spread locally. Regardless of the background, whether these PMIs had been quarantined, sneaked in, or deliberately avoided quarantine and inspection, but in fact there has now been a new phenomenon against the spread of this virus, namely the spread in *banjars*. This is what the Balinese people must be aware of. Sociologically, the distribution in the banjar has the most harmful effect on the frequency of its distribution. First it must be seen that this affected area is the most basic sector of the social system in Bali, namely *Banjar*. This sector is not just a village community which is the basis of the social system in Bali but has characteristics and characters that must be considered in relation to the spread of the Corona virus. Now it has entered one year of the spread of this deadly virus apart from the many reductions in work shifts in various companies, especially those directly exposed in the tourism sector, both hotels and restaurants. Other difficulties also have an impact on the decline in demand for distribution of raw materials which greatly disrupts the rotation of the economic wheels and some joints of community life.

#### **A. Closing**

The discourse and appeal for handling the spread of Covid-19 by the Bali Provincial Government by involving elements of custom, culture and religion will always occur cultural dynamics. In this dynamic, new truths (ideologies) will emerge as an effort to fight against the challenges of life, in this context the spread of the Covid-19 Virus. The synergy between institutions and the inclusion of random knowledge that originates from Hindu religious literature are the peaceful way taken by the provincial government of Bali in ending the spread of the virus. Through a combination of medical - nonmedical (ingredients (medicinal medicine) -*nunas ica*), as taught by the previous Balinese ancestors, a way of peace will be found. But to find a path of success in handling the epidemic, debates, struggles, contestations and even conflicts will occur. This also means that a step concerning the good for the people (the general public) must go through such a long cultural dynamic to find a clear path to the new normal era.

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# Metabolic Syndrome in Community– How We Deal it By Healthy Diet Consumption?

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## ABSTRACT

Metabolic syndrome represents a cluster of metabolic abnormalities that include hypertension, central obesity, resistance and atherogenic dyslipidemia, People know it as as Diabetes Mellitus, Hypertension and Hyperlipidaemia. In many counties, the prevalence of MS ends to increase recently following the improving of national economic development. In Indonesia, Metabolic Syndrome (NCD) are also becoming a major cause of mortality and morbidity. Estimated about 60 million Indonesia was suffered from those diseases on 2019. Though the cause of MS is multifactorial, but it has been associated with changes in peoples' lifestyles such as changes in diet, less active and smoking habit. The present study was aimed to increase our understanding how we deal of MS problem by implementing prevention action and by increasing health diet consumption. To deal these issues comprehensively, the literature of studies was conducted. Indonesia has been aware by launching promotive-preventive anf family based approaches called as Gerakan Masyarakat Sehat including primary, secondary, and tertiary prevention. This MS prevention and control programs emphasize public health and primary care approaches which require effective multi-sector collaboration. The general public needs to be more health conscious by eating healthy diets, exercising regularly, avoiding smoking and inhaling cigarette smoke, and to seek prompt medical attention in case of any signs and symptom of MS mentioned in this article. Vegetarian diet may be as one of good healthy options for dealing MS. Since advances in nutrition proved that plant based diet could best prevent the chronic diseases, society should have encouraged to increase fruit and vegetable consumption and monitored their health status as well.

Keyword: *Metabolic syndrome, healthy diet, health policy*



## Introduction

Metabolic syndrome represents a cluster of metabolic abnormalities that include hypertension, central obesity, insulin resistance and atherogenic dyslipidemia, and is strongly associated with an increased risk of developing diabetes and atherosclerotic and nonatherosclerotic cardiovascular disease.[1] Although research has been carried out in recent decades on metabolic syndrome, the exact cause of metabolic syndrome is not known. The exact underlying etiology is still not completely understood. [1,2]

In Indonesia, Metabolic Syndrome (NCD) are also becoming a major cause of mortality and morbidity.[3–5] These disease comprising Diabetes Melitus, Hypertension, and hhyperlipidmia are leading to population mortality, The prevalence of MS tends to increase in Indonesia, for instance 26% of the adult population had high blood pressure in 2013, and the prevalence increase to 38% in 2018. [6]. Estimated about 60 million Indonesia was suffered from MS on 2019.

Moreover, Metabolic Syndrome (MS) are now the leading causes of death globally.[3] Usually these diseases may manifest terminally as heart attacks and stroke, which are mainly caused by a blockage in the blood vessels that prevents the flow of blood to the heart and brain.[7] About 80% of these deaths occurred in low and middle-income countries. [8]

Unhealthy diet , smoking and less activity was recognized as risk factor of MS.[3,5,9] Since economic of nation improve, it also affects to diet pattern.[8] Ironically, the current data showed Indonesia faces the double nutritional problem.[5] When many people still live on under-nutrition, there are the small groups living on over-nutrition. Over nutrition contributed to increasing of morbidity and mortality of the non communicable diseases (NCD). [3,5,8]

Extensive evidence highlights high cholesterol, obesity, high glucose, physical inactivity, high blood pressure, tobacco/alcohol consumption and unhealthy dietary habits as the main risk factors of MS.[1,3,5,7,10,11] These factors are well-known as modifiable determinants. It's also linked to a condition called insulin resistance. Many features of the metabolic syndrome are associated with “insulin resistance”. Insulin resistance means that the body does not use insulin efficiently to lower glucose and trygliceride levels.[1,2] Moreover, It have been associated with changes in peoples' lifestyles due to the improving economy.[8] Others contributing factors and mechanisms have been proposed metabolic syndrome, including adipose tissue dysfunction, chronic inflammation, oxidative stress, circadian disruption, microbiota, genetic factors, maternal programming, lifestyle factors include dietary habits, activity and perhaps interrupted sleep patterns (such as sleep apnea).[1]



## **How we deal it**

Understanding and prioritizing of these factors is important for successful health prevention and control of MS, because they represent the most important risk factors which should be immediately considered for establishing and strengthening health policy and strategy in a particular area. Moreover, effective performing of health interventions can increase awareness of people of the need to modify their behaviors for wellbeing

Understanding which individuals are at higher risk for metabolic syndrome, given their body size, could have implications for public health and clinical practice. People can measure their weight by weighing them using a scale at home to find out whether they are overweight or are already in the obesity category.[12] A subset of overweight and obese individuals have been documented to have normal metabolic profiles. These individuals, who include over 30% of obese [body mass index (BMI)  $>30 \text{ kg/m}^2$ ] and over 50% of overweight (BMI  $>25 \text{ kg/m}^2$  and  $<30 \text{ kg/m}^2$ ) adults, have normal insulin sensitivity, blood pressure and lipid profiles. Ideally, people also know their blood pressure status and blood sugar level. While blood pressure indicated at least  $\geq 140/90 \text{ mmHg}$  and fasting blood sugar level exceeded  $\geq 120 \text{ mg/dL}$  should be cautioned and monitored regularly.[6] The MS risk will be higher while having smoking and sedentary (less physical activity) habit.

Education and medical promotion has a many benefit to control MS. [13,14] MS prevention and control programs emphasize public health and primary care approaches (rather than secondary and tertiary treatment), which require effective multi-sector collaboration.[9] In response to the increasing impact of NCDs, the ministry of health established policy and planning for MS prevention and control for public health and primary care approaches.[15]

Gerakan masyarakat sehat launched by ministry of health was promotive –prevcensive and family based approaches which directed to encourage people to live a healthy life in a comprehensive manner. [15] This policy actually focused on prevention action and need collaboartion with other sectors. Here, advocacy, community empowerment, strengthening of health services and networking are the main activities .The strategies include

### **Primary Prevention** (targets the general public and individuals who may not already have MS)

- Advocacy seminars could be held with political leaders, policy makers, health officials, district officials and members of the general public to raise awareness on MS. Including making better city plans were there are green areas designated to exercising and other sporting events.



- Put bans on smoking in public places and cigarette advertising. Increase taxes on cigarette importation.
- Health education awareness campaigns could be held in schools, and out-of-school communities to raise awareness on MS.
- Providing children in school with better healthier meals
- Media campaigns could be conducted on radio, TV, newspapers, billboards and posters on MS. Encouraging healthy lifestyles

These interventions could be conducted by Ministry of Health (MOH), Ministry of Education (MOE), Non Governmental Organisations (NGOs), Faith Based Organisations (FBOs), Community Based Organisations (CBOs), health professionals, political figures, public celebrities and sports clubs like 'hashers' (A big group of health conscious people that jog and do other sporting activities in a bid to keep fit) weekly

**Secondary prevention** (targets those with MS and are at a high risk of reoccurrence of for example a stroke or heart attack) These people are encouraged to;

- Eat healthy diets (lots of fruits, vegetables, less fatty foods, lots of fibre.)
- Reduce or stop alcohol consumption
- Exercise regularly
- Go for regular blood pressure check-ups
- Seek immediate treatment and medical attention in case of suspected signs and symptom of 'an attack'.

Interventions could be conducted by MOH, MOE, health professionals, gym and fitness instructors, and concerned members of the public.

### **Tertiary prevention**

This may include:

- Scaling up of emergency services at hospitals and clinics
- Making MS drugs and treatment available and affordable.
- Training health workers on what treatment to offer NCDs patients.

This could be done by health professionals, expatriates and MOH.

### **How vegetarian diet can prevent or avoid NCD diseases?**

Diet is very important to note in order to avoid risk factors for metabolic syndrome.[10,12,16]  
There is a close relationship between diet and the prevalence of metabolic syndrome. A diet that is



not in accordance with physical activity can cause an imbalance in metabolic processes in the body. Obesity can occur because the number of calories in is greater than the amount of energy expended. Obesity is a major indicator of metabolic syndrome, therefore it is necessary to modify the diet.[12]

In regard of vegetarian diet, various fruit and vegetable contain bio-compounds (flavonoids, sulfur, quercetin, allium, stilbene, etc.) seem to exert numerous benefits against atherosclerosis.[17] Atherosclerosis itself mostly caused by free radical and higher fat consumption. For the type of food consumed, the recommended food is low in saturation and high in fiber by increasing the consumption of fruits and vegetables. [17,18] For carbohydrates, choose foods that contain complex carbohydrates rather than complex ones such as rice, potatoes, sweet potatoes, corn and others instead of honey, sugar, syrup and others. This is because complex carbohydrates will take longer to be absorbed in the body. For protein consumption, it is recommended to increase vegetable protein rather than animal protein to avoid excessive consumption of cholesterol contained in animal protein products. Foods recommended contain vegetable protein, namely tofu, tempeh, nuts. For fat consumption, it also needs to be limited in a certain amount. Reduce consumption of animal fats because they contain cholesterol. Excessive consumption can increase cholesterol levels in the body. Fatty foods that must be limited to consumption are coconut milk, oil, meat, fish, cheese and others. Besides, we also need to increase the consumption of foods that contain high fiber such as fruits and vegetables. These fruits are better consumed directly, and for vegetables it is better to boil and in the cooking process to minimize the amount of oil used.

The current health nutrition program promotes the balanced diet that people should require enough calories from carbohydrate, protein and fat. [19] The difference with the previous nutrition program is the new guidelines emphasize the importance of high intake of vegetable and fruit and reduce the intake of high saturated fat, sugar and salt. Vegetarian diet is one of suitable diet as this could meet the protein need as long as vegetarians eat various plants and know about the diversity of protein plant sources. Vegetarian is healthful diet and can be practiced on all of age groups as the American Dietetic and Dietitians of Canada stated: *“It is the position of the American Dietetic Association and Dietitians of Canada that appropriately planned vegetarian diets are healthful, nutritionally adequate, and provide health benefits in the prevention and treatment of certain diseases”*. [20]

The advances in nutrition research indicated that vegetarian diet contributed to human health; [17,19] Diets largely based on plant foods could prevent nutrient deficiencies and reduced risk



of diet-related chronic diseases like. hypertension, Coronary heart disease, type 2 Diabetes, obesity and cancer. [17,18,21] In community level, almost everyone agrees that people could benefit from increasing their consumption of fruits, vegetables and other plant-based foods. In this context, it is better people chose the balanced diet by increasing vegetable consume and decreasing animal fat consumption.

## Conclusion,

There is an increase of metabolic syndrome in Indonesia especially among ‘well-to-do’ citizens. Indonesia has launched Gernas policy in dealing MS control. The general public needs to be more health conscious by eating healthy diets, exercising regularly, avoiding smoking and inhaling cigarette smoke, and to seek prompt medical attention in case of any signs and symptom of MS. People can start by increasing daily fruit and vegetable consumption and vegetarian diet may be as one of good healthy options for dealing MS.

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# Data Mining the Grouping of Fire Incidence Areas in DKI Jakarta uses the K-Means Algorithm

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## ABSTRACT

A fire is a flame that occurs, whether small or large, burning in an unwanted area and difficult to control. Therefore, early prevention must be done, one of the ways is by grouping areas that often experience fires. The K-Means algorithm is a method used for clustering or grouping data. The data used is data on fire incidents in DKI Jakarta Province in December 2019. This data consists of 861 data consisting of attributes of the type of event, description of the event, source of information, address of the incident, sub-district, sub-district, region, loss and estimated loss. For the implementation of data processing using the WEKA application. In WEKA, there are several algorithmic approaches to dealing with clustering problems and in this feature there is also a conclusion section of the data clustering process which provides an outline of the calculations and results given in the implementation of the clustering algorithm.

*Keywords : data mining, fire incidence, k-means, weka*

## Introduction

Disasters in Indonesia are divided into 3, namely natural disasters, non-natural disasters and social disasters. Fire incidents are included in non-natural disasters. Fire is an event that arises from uncontrolled fire caused by electrical short circuit, cigarettes, and chemicals. The impact of these fires is not only on the environment, but also on health. Health effects include dehydration, increased heart rate, eye irritation, and burns. Therefore, it must be done early to find out about the occurrence of a fire. One way is to group the places where fires occur, so that later we can find areas where fires often occur. Data mining can be used to perform grouping by extracting information from available data. According to the Gartner Group, data mining is the process of finding new relationships that have meaning, patterns and habits by sorting out most of the data stored in storage media using pattern



recognition technologies such as statistical techniques and mathematics. Data mining is a combination of several scientific disciplines that brings together techniques from machine learning, pattern recognition, statistics, databases, and visualization for handling problems of retrieving information from large databases.

One of the methods contained in data mining used in this study is clustering where the method identifies objects that have certain characteristics in common, and then uses these characteristics as "characteristic vectors" or "centroids". The grouping that the author applies uses the K-Means Clustering algorithm, the K-Means Clustering algorithm is able to group data in the same group and different data in different groups. The data used is data on fire incidents in December 2019, amounting to 861 data. The data contains information on sub-districts and sub-districts that will be grouped so that it can be identified the group centers of fire occurrence based on the frequency of fire occurrence. Data analysis using the WEKA application. WEKA is able to solve data mining problems in the real world, especially the classification that underlies the machine learning approach.

## **Literature Review**

### ***Previous Research***

Some of the previous studies that were used as references are:

1. Research with the title "Application of the K-Means Algorithm for Clustering Data on Drugs at Pekanbaru Hospital". The purpose of this study was to classify drug data in the Pekanbaru Regional General Hospital which can be used as a reference in decision making in planning and controlling medical supplies at the hospital. The method to be used for drug data clustering is the K-Means algorithm which is a non-hierarchical data clustering method that partitions data into clusters so that data that has the same characteristics is grouped into the same cluster and data that has different characteristics is grouped into the same cluster. in another group. From the results of clustering on drug data, it can be concluded that the group of drugs which includes a small amount of drug demand average less than 18,000 pieces of drug each year, and drugs that are included in moderate use, the average demand for drugs each year is between 18000-70000 pieces, while drugs that are classified as moderate entered into the group of drugs with high usage average drug demand per year is over 70000 pieces. From the cluster analysis above, it may be necessary to do further research so that drug data clustering can be done more validly by determining the best centroid value



2. Research with the title "Implementation of the Improved K-Means Method for Classifying Geothermal Points". A fire is a flame that occurs, whether small or large, burning in an unwanted area and difficult to control. Therefore, early prevention must be done, one of the ways is by using geothermal points detected by satellites. This is used as an indicator of land and forest fires in an area, so the more hotspots there are, the more potential incidents of land fires in an area. Therefore it is necessary to apply a system that can cluster geothermal point data in order to produce a system output that can group hotspot data containing hotspot information that has the potential to cause fires with various states, such as high, medium, and weak potential. Improved K-Means are one of the most popular clustering methods and can be used for grouping geothermal points. This algorithm performs the clustering process based on the maximum distance as the center of the cluster and the center of the cluster will be calculated the distance with other data to be grouped. This was done continuously until the data was grouped into cluster does not change. Based on the results of the design, implementation and testing that has been done, the following conclusions are obtained: a). The improved k-means method has been successfully implemented in the system for classifying geothermal point data. b). The improved k-means method applied to the system is carried out in 2 stages, namely selecting the starting center point and grouping data using the k-means clustering method. c). In the improved k-means, the determination of the center point is taken based on the farthest distance between the data so that if repeated tests are carried out on the same data the initial center point value does not change. d). Tests are carried out using different data, namely 50 data, 100 data, 200 data, 300 data, 400 data, 500 data, 600 data and 700 data with the number of clusters 2 to 10, getting the highest silhouette coefficient value in cluster 2 and for 700 data that is 0.908000874. e). The test results obtained from the best cluster value, namely 2, produce a confidence value of 100 in cluster 2 and a confidence value of 61.73986486 in cluster 1. That way, the potential for fires to occur at hotspots in cluster 2 is higher than in cluster 1.
3. Research with the title "Application of the K-Means Method for Student Clustering Based on Academic Values with Weka Interface Case Studies at the Department of Informatics, UMM Magelang". This study examines existing data in the data warehouse of Muhammadiyah University of Magelang to make it easier to find 5 students in the Department of Informatics in selecting to participate in competitions. The competition that will be followed is the Cyberjawara event competition organized by the Indonesia Security Incident Response Team on Internet Infrastructure (ID SIRTII) of the Ministry of Communication and Information Technology of the



Republic of Indonesia. Testing this data in the initial phase of selecting students who have the opportunity to take part in the Cyberjawa event. The initial phase of the system performs a grouping process against existing criteria. These criteria are processed using the K-Means grouping method. Based on the research conducted, it can be concluded that the K-Means algorithm can be used to group students based on GPA and several course attributes.

### ***Fire***

Fire is an event that arises from uncontrolled fire caused by electrical short circuit, cigarettes, and chemicals. The Fire Triangle Guide describes the appearance of fire. The fire triangle requires 3 components, namely flammable materials, oxygen and heat. Fires in buildings can cause many losses, including human casualties, property loss, environmental damage and disturbance to public peace<sup>2</sup>

A passive fire protection system is a system formed to protect buildings by regulating the use of building materials and components, compartmentalization or separation of buildings based on the level of fire resistance, and protection against openings. An active fire protection system is a system designed to protect buildings through complete manual or automatic fire detection systems, water-based fire extinguishing systems such as sprinklers, standpipes and fire hoses, and chemical-based fire extinguishing systems, such as fire extinguishers and special extinguishers.

### ***Data Mining***

Data mining is the process of analyzing data from different perspectives and summarizing it into important information that can be used to increase profits, reduce costs, or even both. Technically, data mining can be called a process to find correlations or patterns of hundreds or thousands of fields from a large relational database. The ability of data mining to find valuable business information from a very large database, analogous to mining precious metals from the source land, this technology is used to:

1. Prediction of trends and business properties, where data mining automates the process of searching for predictive information in large databases.
2. The discovery of previously unknown patterns, where data mining "sweeps" the database, then identifies previously hidden patterns in one swipe.

Data mining and knowledge discovery in database (KDD) are often used interchangeably to describe the process of extracting hidden information in a large database. Actually the two terms have



different concepts, but are related to one another. And one of the stages in the whole KDD process is data mining.

The KDD process in general can be explained as follows:

1. Data Selection

Selection (selection) of data from a set of operational data needs to be done before the information mining phase in KDD begins. The selection result data that will be used for the data mining process is stored in a file, separate from the operational database.

2. Pre-processing / Cleaning

Before the data mining process can be carried out, it is necessary to carry out a cleaning process on the data which is the focus of KDD. The cleaning process includes removing duplicate data, checking for inconsistent data, and correcting errors in data, such as typographical errors.

3. Transformation

Coding is a transformation of the data that has been selected, so that the data is suitable for the data mining process. The coding process in KDD is a creative process and really depends on the type or pattern of information to be searched for in the database

### ***Data Preprocessing***

Data Preprocessing is an important step in the Data Mining process. Data collection methods are often uncontrolled, produce something outside the range of values, result in impossible data combinations, and missing values. If data analysis is carried out without paying attention to some of these things, it can lead to incorrect analysis results. Therefore, the representation and quality of the data are the first things that must be done before carrying out the analysis. The data preprocessing method is divided into four categories, namely (Alka Arora, 2011):

1. Data Cleaning

In Data Cleaning, one must pay attention to filling in incomplete data (missing values), handling noise data (data containing errors or outliers), and correcting inconsistent data.

2. Data Integration

Data integration is carried out to combine data from several sources into one data store such as data warehousing.

3. Data Transformation



Data Transformation is changing data in order to obtain higher quality data. The steps that can be taken include normalizing data, removing noise from data (smoothing), aggregating data, and generalizing data.

#### 4. Data Reduction

Data Reduction is a step to reduce the volume or dimension of the data (attribute data). The steps that can be taken include cube data aggregation, dimension reduction, data compression, and discretization.

### ***K-Means***

K-Means Clustering is, K is intended as a constant number of clusters desired, Means in this case means the average value of a data group which in this case is defined as a cluster, so K-Means Clustering is a method of analyzing data or data mining methods that performs the modeling process without supervision (unsupervised) and is one of the methods that perform data grouping with a partition system. The K-Means method tries to classify existing data into several groups, where the data in one group have the same characteristics as each other and have different characteristics from the data in other groups. The K-means algorithm is an algorithm that requires k input parameters and divides a set of n objects into k clusters so that the level of similarity between members in a cluster is high while the level of similarity to members of other clusters is very low. The similarity of members to the cluster is measured by the proximity of the object to the mean value of the cluster or it can be referred to as the cluster centroid or center of mass. Here is the formula for determining the distance of data from each centroid:

$$d(P, Q) = \sqrt{\sum_{j=1}^p (x_j(P) - x_j(Q))^2}$$

Information :

D = document point

P = data record

Q = data centroid

The shortest distance between the centroid and the document determines the position of the document cluster. The other iteration formulas are defined as follows:





$$C(i) = \frac{x_1 + x_2 + x_3 + \dots + x_n}{\sum x}$$

Information :

$X_1$  = Value of 1st record data

$X_2$  = Value of 2nd record data

$\sum x$  = number of data records

This experiment uses the most common algorithm used in clustering, namely the K-Means algorithm. This algorithm is popular because it is easy to implement and the time complexity is linear. The disadvantage is that this algorithm is sensitive to cluster initialization.

The basic algorithm is as follows:

1. Initialize the cluster
2. Load each document into the most suitable cluster based on the size of proximity to centroid.  
The centroid is a term vector which is considered as the midpoint of the cluster.
3. After all the documents go to the cluster. Recalculate the cluster centroid based on the documents in the cluster.
4. If the centroid does not change (with a certain threshold) then stop. If not, go back to step 2.

### ***Cluster***

Clustering is a grouping of records, observations, or attention and forms a class of similar objects. A cluster is a collection of records that are similar to one another and are not similar to records in other clusters. Clustering is different from classification in that there is no target variable in the clustering. Clustering does not attempt to classify, estimate, or predict the value of the target variable. However, the clustering algorithm tries to divide the entire data into groups that are similar (homogeneous), where the similarity of records in one group will be of maximum value, while the similarity to records in other groups will be of minimal value. Examples of clustering in business and research is:

- a. Get consumer groups for target marketing of a product for companies that do not have large marketing funds.
- b. For the purpose of an accounting audit, namely to separate good and suspicious financial behavior.



- c. Doing the clustering of the expression of the genes, to get the similar behavior of the genes in large numbers.

### ***Data Visualization***

Information is an important part of human life, which encourages new ways of thinking. Large amounts of information or data generated from different sources are then stored in various formats. The main problem is how to understand and extract knowledge from the big data stored. Gathering information is no longer a problem but extracting valuable knowledge from the information gathered. The purpose of visualization is to analyze, explore, find, describe, and communicate information in an understandable form. Visualization is used to present a large amount of information that is coherent, compact, from different points of view, and provides some details (Muzammil Khan and Sarwar Shah Khan, 2011).

Choosing the right visualization method will be influenced by what kind of communication goals you want to show and say through the visualization. The following is an outline of the communication objectives for each method (Andy Kirk, 2012):

1. Compare categories.  
For easy comparison between grade categories. Some approaches that can be used are dot plot, bar chart, gantt chart, pixelated bar chart, histogram, slopegraph, radial chart, glyph chart, Sankey diagram, area size chart, small multiples, and word cloud.
2. Looking at the overall hierarchical relationship.  
To provide a breakdown of values in relation to these values with all other elements. Examples are pie charts, stacked bar charts, square pies, tree maps, circle packing diagrams, bubble hierarchies, and tree hierarchies.
3. Shows changes over time.  
To exploit temporal data and show changing trends and patterns in values over a continuous period of time. Examples are line charts, sparklines, area charts, horizon charts, stacked area charts, stream graphs, candlestick charts, barcode charts, and flow maps.
4. Mapping geo-spatial data.  
To represent data with geo-spatial properties with many different mapping frameworks. The most commonly used approaches are choropleth maps, dot plot maps, bubble plot maps, isarithmic maps, particle flow maps, cartograms, dorling cartograms, and network connection maps.



## **WEKA**

“WEKA is a package of practical machine learning tools. “WEKA” stands for “Waikato Environment for Knowledge Analysis”, created at the University of Waikato, New Zealand for research, education and various applications. WEKA is easy to use and applies to several different levels. There is an implementation of a state of the art learning algorithm that can be applied to datasets from the command line. WEKA contains tools for data preprocessing, classification, regression, clustering, association rules, and visualization. Users can preprocess data, enter it in a learning schema, and analyze the resulting classifier and performance, all without writing any program code. An example of using WEKA is applying a learning method to a dataset and analyzing the results to obtain information about the data, or applying several methods and comparing their performance for a selection.

Weka consists of a collection of machine learning algorithms that can be used to generalize / formulate a collection of sampling data. Although the strength of Weka lies in the more complete and sophisticated algorithms, the success of data mining still lies in the human knowledge of the implementers. The task of collecting high-quality data and modeling knowledge and use of proper algorithms is required to ensure the expected accuracy of the formulations. The four buttons above can be used to run the application (Muhammad Fadli Fakhri, 2017):

1. Explorer is used to dig further data with the WEKA application
2. Experimenter is used to conduct experiments with statistical testing of learning schemes
3. Knowledge Flow is used for supporting knowledge
4. Simple CLI interface using a command-line display that allows direct execution of weka commands for Operating Systems that do not provide direct

At the top of the window, precisely under the title bar, there is a row of data such as Preprocess, Classify, Cluster, Associate and Select Attributes Visualize. By using WEKA, the data mining process can easily be carried out after the pre-process stage is carried out.

## **Results and Discussion**

The stages of the research that will be carried out are as shown in Figure 1. The data is prepared through a preprocessing process. After the data is ready, a pattern analysis is performed using the K-Means algorithm. From the results of the analysis obtained, the results were visualized using the WEKA application.



Figure 1. Stages of the Research

## 1. Data

The data used is data on fire incidents in December 2019, amounting to 861 data. Data contains the date, type of disaster, description, source of information, address of the incident, sub-district, sub-district, total loss, and estimated loss.

Figure 2. Data

## 2. Data Preprocessing

The data is then prepared through a preprocessing process by selecting only the attributes that will be used, namely the type of disaster, description, sub-district and sub-district.

Figure 3. Data Preprocessing



### 3. Analysis and Visualization

After the data is ready, analysis is carried out using the K-Means algorithm and visualized using the WEKA application. The results of the analysis show that the data is divided into 5 group centers, namely the first group is in the Pasar Minggu sub-district, the second group is Tanjung Priok, the third and fourth group is Tanah Abang, the fifth group is Matraman as shown in Figure 4. This grouping is based on the frequency of appearance of the data. . So that it can be seen which groups have frequent fires and which groups do not fire frequently. The data of each sub-district is in the group which is shown in Figure 5.



Figure 4. K-Means Analysis

After the data is grouped, the results of the data visualization can also be seen as shown in Figure 6. Group differences can be seen by looking at the difference in color. The first group can be seen in blue, the second group is seen in red, the third group is seen in green, the fourth group is seen in light blue and the fifth group is seen in pink.



Figure 5. Data Cluster

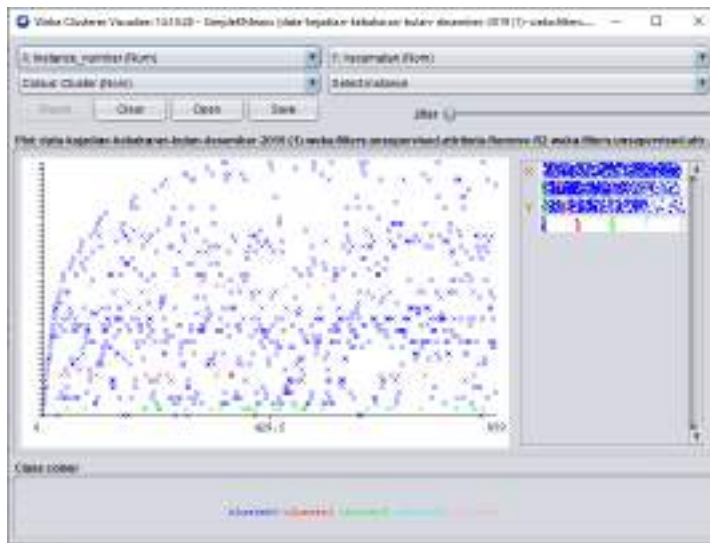


Figure 6. Data Visualization

## Conclusions and Suggestions

The conclusions obtained from this study are:

1. Analysis of data grouping of fire incidents in DKI Jakarta in 2019 can be done using the K-Means algorithm.
2. The WEKA application can be used to visualize data using the K-Means algorithm.

The suggestions given for further research are:

1. Data can be added using data from the following year.
2. Data visualization can be improved by using a website.

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# **Blended Learning: New Normal Learning Solutions For Economic Education In The Era Of Industrial Revolution 4.0**

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## **ABSTRACT**

The Covid-19 pandemic that has shaken the world since early 2020 has had a profound impact on all aspects of life, including in the aspect of education. This condition finally encouraged the government to implement distance learning. The goal is to break the chain of spreading Covid-19. Even though at this time it has entered a new normal or new life order, the learning process is still being carried out from home before the government issues a decision to return to direct or face-to-face learning. The era of the industrial revolution 4.0 is an opportunity for educators to develop their competence in creating relevant learning methods and models. Innovations in learning and the use of appropriate and varied media greatly support efforts to improve the quality of education in this new normal period. Blended learning is a new normal learning model solution for Economic Education subjects in the era of the industrial revolution 4.0. The blended learning model is learning that integrates face-to-face learning with online based learning that takes advantage of current technological developments.

*Keywords: Blended Learning; Economic Education; Industrial Revolution 4.0*

## **Introduction**

In 2020, the world is shaken by the emergence of a virus known as Covid-19 (Corona Virus Disease 2019). This virus spreads very quickly and has spread to almost all countries, including Indonesia, in just a few months. This virus causes disorders of the respiratory system, severe lung infections, and death. Transmission through human contact is difficult to predict due to community activities, so the government has implemented the PSBB (Large-Scale Social Restrictions).



This policy had a profound effect on various fields. One of the areas affected by the emergence of the Covid-19 virus is education. The Ministry of Education and Culture of the Republic of Indonesia takes steps every school to carry out learning activities from home.

The Covid-19 pandemic has transformed educational technology to support learning from home. Various digital platforms have launched various online learning applications. Online learning applications are developed by providing features that facilitate learning activities. One of them is the platform provided by Google and Microsoft.

Formal educational institutions have an important role in the adaptation process of students, so that they become a generation that is not left behind with rapidly developing technology. Schools are required to follow technological developments so that they are able to produce competent graduates with knowledge, skills and attitudes. The introduction of new technology must be carried out in the teaching and learning process so that students can become people who are ready to face the world's challenges in the era of the industrial revolution 4.0. In this era of the industrial revolution 4.0, the world of education is required to be able to equip students with skills in the industrial revolution era 4.0. These skills require students to be able to think critically in solving problems, be creative and innovative and have communication and collaboration skills. Not only for students, educators must also be ready to face these skills. Then what is the role of educators in the era of the industrial revolution 4.0? Educators must have strong competences, have soft skills, including: critical thinking, creative, communicative and collaborative. The role of educators as role models, to spread passion and be inspirational. This is a role technology cannot replace. To achieve the skills of the 4.0 industrial revolution era, learning strategies must also be adjusted, one of which is through integrated learning or blended learning. Blended learning is a way of integrating the use of technology in learning that allows learning that is appropriate for each student in the classroom. Blended learning allows reflection on learning (Wibawa, 2018). The problem that will be discussed in this article is how do educators integrate the use of industrial revolution era 4.0 technology as a learning solution for the new normal period for Economic Education courses?

Prendergast (2004: 1) states that blended collaborative learning is essentially a tutor-led distance learning method that blends available face-to-face and online techniques on a foundation frame work facilitated asynchronous conferencing. According to Prendergast that mixed collaborative learning is basically a distance learning method that combines face-to-face learning and online techniques with an asynchronously configured framework foundation. Widyaningsih (2019) entitled "Development of Blended Learning Models for Elementary Schools", the result of his



research was that the application of the blended learning model was able to increase student achievement and motivation as well as learning to be more fun.

In addition, Khan argues "blended learning combines multiple delivery media that are designed to complement each other and promote learning and application learned behavior". Khan stated that the definition above is based on an understanding that the learning carried out by each student tends to be different. Therefore, the organization, in this case the teachers, must use a varied learning approach in its learning strategy, so that the correct content will be obtained in the right format for the right people at the right time. Indriani (2019) entitled "The Effect of Blended Learning Model on Motivation and Learning Achievement of Elementary School Students", resulted in the conclusion that there was a significant increase in student motivation and learning achievement due to the application of the blended learning model.

Based on the above opinions, it can be concluded that what is meant by blended learning is learning that combines the power of face-to-face learning with online learning. Therefore, the authors were inspired to design learning using the blended learning method to facilitate the implementation of Economic Education learning in the New Normal period due to the Covid-19 pandemic and can even be used after the pandemic ends. This article is a strategy for implementing learning from home for Economic Education subjects using multimedia, more fun, easy and meaningful through technology.

Campus is a very fun activity, because campus is a medium of interaction between students and lecturers to improve intelligence abilities, skills and concern for the environment. However, related to the Covid-19 pandemic, the government (Ministry of Education and Culture/Kemendikbud) finally issued Circular Number 4 of 2020 concerning the Implementation of Education Policies in an Emergency Dispersion Period. In the Circular, it is explained about the Learning Process Activities carried out from Home (BDR). After the SE, there were activities in which educational institutions seemed to stop suddenly. Now the life order has entered a new phase, namely the New Normal, but with regard to the spread of Covid-19 which is still increasing, the health and safety of students, lecturers, and the entire academic community remains the main consideration in implementing education policy.

The Circular Letter (SE) issued by the Ministry of Education and Culture in March 2020 also emphasized that Learning from Home learning activities and tasks can vary between students, according to their respective interests and conditions, including considering gaps in access/learning facilities at home. Economic education is also one of the courses in Higher Education which aims to



educate students to have intelligence abilities, attitudinal abilities and skills that are based on theoretical and practical economic values. So in this New Normal learning, Economic Education must also follow the Ministry of Education and Culture's policies by carrying out Learning from Home activities and tasks that vary according to the interests and conditions of each student.

Revolution is a social and cultural change that takes place quickly and involves the basis or principles of community life. Meanwhile, the industrial revolution is a rapid change in the agrarian economy to an industrial economy that uses machines to process raw materials into ready-to-use materials. The Industrial Revolution has changed the way humans work from using hands to using machines. The periodization of the industrial revolution has occurred in 4 waves. The first wave took place in England in the mid-17th century. The 2nd wave industrial revolution is a continuation of the first wave that occurred in the middle of the 18th century in Europe. The 3rd wave industrial revolution developed in the 1970s in the United States. At this time, information technology and computerized systems were introduced that were developing so fast to other countries.

The 4th wave industrial revolution is an era of the application of modern technology which is often referred to as the Industrial Revolution 4.0 or Industrial Revolution 4.0. This era occurred in the 2000s with the application of modern technology in the form of fiber technology and an integrated network system that works in every economic activity from production to consumption. Paulina (2019) explained that the technological developments in the industrial revolution era experienced rapid development, especially internet technology which helped encourage the development of distance learning in this New Normal era. This is because internet technology can be accessed anytime, anywhere, is multi-user and offers many conveniences. The Covid-19 pandemic encourages a transformation of educational technology to support learning activities from home. Various digital platforms have launched various online learning applications. Online learning applications are developed by providing features that facilitate learning activities, such as WhatsApp Group, Google Classroom, Youtube, E-book and Power point. So the blended learning strategy here is a learning strategy that combines various online-based learning media that is integrated with face-to-face learning.

The purpose of writing this article is to describe Blended learning as a new normal learning model solution for Economic Education subjects in the era of the industrial revolution 4.0.



## Methods

This study uses an observation method, namely data collection techniques, where the researcher does not have to communicate (interview) with the object of research (Sugiyono, 2011: 310-317). There are three kinds of observative research, namely: first, participatory observation in which the researcher is actively involved with the object of research being observed as a source of data. Second, frank or obscure observation, where the researcher states frankly to the object of research, that the researcher is making observations on the object of research, but also, at certain times the researcher is not straightforward or subtle about the object of the researcher. Third, unstructured observation, where the researcher does not prepare a structured and systematic research. Research objects are places, actors, and activities.

Kusumah (2011: 66-67) says that observation is the process of collecting data in a study, where a researcher is directly involved in it. Then there are criteria for selecting objects of observation, namely: the type of data needed in order to implement an action, the existence of relevant indicators in the form of social behavior, the existence of data recording procedures, and the use of data for analysis. This observation technique starts from planning, implementation, and discussion.

## Results

### Blended Learning Strategy in New Normal Period

There are five elements used in the implementation of blended learning, namely:

1. Face to face

Meetings between lecturers and students are still carried out in the learning process. Media used during the New Normal period included using video calls via WhatsApp (WA), google meet, google duo or face-to-face online applications using other applications. If conditions allow it to return to normal, learning can still be continued face-to-face in learning on campus. Face-to-face activities are carried out with the aim of interacting directly so that educators or lecturers can see the condition of students, greet and communicate other important things.

2. Independent Learning

Students deepen their understanding of the material by doing independent learning. Learning resources, time and forging can be determined by each student. When carrying out independent study at home, students can record new things and problems encountered and then consult the Economics Education lecturer. Even though students learn independently, lecturers can still direct students to understand learning materials through media sent by



lecturers in online classes. The media, for example from YouTube, e-books and materials summarized in power points, are distributed in the form of videos, jpg / jpeg images, power point presentations (PPT) or power point shows (PPS).

### 3. Online Class Application

In distance learning students need certain applications or platforms to communicate and interact with lecturers or between students. The platforms commonly used include: WhatsApp Group, Google Classroom or Microsoft Teams. This application is useful for lecturers to deliver material, send assignments, access students' work and so on. The learning media platform can be used as a medium for mentoring and tutorials to provide academic assistance or tutoring to students.

### 4. Cooperation

Apart from independent learning, blended learning is also a collaborative learning model. The learning media platform used can be used for collaboration between lecturers and students, lecturers and parents, or between students. Collaboration is needed so that the new normal learning of Economic Education can run well and learning objectives are achieved.

### 5. Evaluation

In its implementation, the Learning from home activity does not necessarily go according to plan, there must be obstacles and problems, both positive and negative. So that evaluation is needed in order to improve in the learning implementation process. The learning evaluation system with blended learning is different from the evaluation in ordinary face-to-face learning. Blended earnings evaluation is based on processes and results that can be done through student performance appraisals with various platforms, including google forms, interactive PPT-based games, or assignments based on portfolios. Assessment is not only from the lecturer, but there needs to be a self-assessment. This self-assessment is carried out by students themselves and other students. This trains these students to be independent, responsible and honest in the learning system. Even so, assessments by quizzes, assignments and those commonly applied in conventional learning are still needed, but they are not the only way of assessment.

## **Implementation in Economic Education Learning**

This blended learning-based Economic Education Learning was implemented in the even semester of the 2019/2020 school year when the government (Ministry of Education and Culture



/Kemendikbud) issued Circular Letter number 4 of 2020 concerning the Implementation of Education Policies in an Emergency for the Spread of Covid-19. Parents and students find it difficult to follow online learning. The implementation of blended learning is a learning strategy designed to facilitate the implementation of learning activities from home. Blended learning is learning that uses a combination various applications both features that facilitate learning activities, such as WhatsApp Group, Google Classroom, Youtube, E-book and Power point. The implementation of this strategy is carried out by socializing it to parents through the WhatsApp Group media. Socialization is done by sending guides or video tutorials to parents. The result is that all students can follow the learning carried out by the lecturer.

Classrooms are virtually created using Google Classroom and the WA group. Apart from being a forum for delivering material and assignments, virtual classrooms are also a medium for communicating and interacting with students and parents.

One of the media to complement the learning resources of students, lecturers make learning media based on YouTube content. Students can study anytime and anywhere. Youtube is a means for lecturers to convey learning objectives and materials.

1. Evaluation and Attendance with Google Form

Evaluation of teacher learning uses google form to make evaluation questions. The questions used are in the form of multiple choices, short entries and descriptions. The lecturer shares sending the google form link to google classroom. In addition to evaluation, google form can also be used for the implementation of student attendance.

2. Active Participation of Students

The implementation of the blended learning strategy during the new normal period brought significant progress for students in understanding lecture material. This is evident from the active and enthusiastic participation of students in virtual meetings either via video calls, google meet or delivery of material via YouTube.

## **Conclusion**

The learning carried out during the New Normal period was different from the learning that was carried out normally. Blended Learning can integrate face-to-face learning and online-based learning by taking advantage of technological developments in the era of the industrial revolution 4.0. The application of blended learning has an extraordinary influence on students so that they are able to experience developments in understanding the material. Blended learning also facilitates the





implementation of Economic Education learning in the New Normal era due to the Covid-19 pandemic to achieve learning goals. Constraints that may be faced are the limited technological facilities on the part of students and a lack of motivation in learning.

In order for the application of blended learning to be carried out well, it is necessary to have a synergistic role between lecturers, students and infrastructure readiness and campus management. In addition, lecturers must continue to improve their competence in mastery of technology because this learning strategy still needs a lot of development and improvement.

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