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HUMAN RESOURCE ECONOMICS
2022
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"decent work and economic growth"

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**PROCEEDINGS OF INTERNATIONAL
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PROCEEDINGS OF INTERNATIONAL SEMINAR ON HUMAN RESOURCE ECONOMICS 2022 (ISHRE 2022)

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ISHRE2022 PROCEEDING (LIST OF PAPER)

FULL PAPER

NO	TITLE OF PAPER	AUTHOR/S	PAGE
1.	THE INFLUENCE OF TAX KNOWLEDGE AND TRINGA TEACHINGS ON THE OBEDIENT INTENTIONS OF PROSPECTIVE TAXPAYERS ONLINE BUSINESS ENTREPRENEURS	Dewi Kusuma Wardani & Mayrisa Eka Putri <i>Faculty of Economics, Universitas Sarjanawiyata Tamansiswa Yogyakarta, Indonesia</i>	1-12
2.	THE INFLUENCE OF OPPORTUNITY AND PRESSURE ON FINANCIAL STATEMENT FRAUD DETECTION (A STUDY OF COMPANIES REGISTERED ON THE JAKARTA ISLAMIC INDEX)	Dewi Kusuma Wardani & Nurul Finadia Margiani <i>Faculty of Economics, Universitas Sarjanawiyata Tamansiswa, Indonesia</i>	13-25
3.	THE INFLUENCE OF MOTIVATION AND UNDERSTANDING OF TAMANSISWA TEACHING "OPOR BEBEK MENTAS SAKA AWAKE DHEWE " ON INTENDED ENTREPRENEURSHIP INTENTION	Dewi Kusuma Wardani & Anggun Satri Ardhani <i>Faculty of Economics, Universitas Sarjanawiyata Tamansiswa Yogyakarta, Indonesia</i>	26-35
4.	SHOULD HIGHER EDUCATION CONTRIBUTE TO THE IMPLEMENTATION OF CIRCULAR ECONOMY AND SUSTAINABLE DEVELOPMENT? A REVIEW	Kardiyem ¹ , Aniek Hindrayani ² , Mintasih Indriayu ³ , Siti Mukoyimah ⁴ <i>Universitas Negeri Semarang^{1,4}, Universitas Sebelas Maret^{2,3}</i>	37-53
5.	THE MAMUT'S MONOLOGUE: REVITALISING THE LOCAL COMMUNITY IN RANAU	Charlie Albert Lasuin ¹ , James Alin ² , Datu Razali Datu Eranza ³ , Sofiana Waslin ⁴ & Nelson Lajuni ⁵ <i>Faculty of Business, Economics and Accountancy, Universiti Malaysia Sabah^{1,2,3,5} Sabah Parks⁴</i>	54-61
6.	DARK TOURISM: A NEW CHAPTER OF TOURISM INDUSTRY IN SABAH	Kimberly Justin, Charlie Albert Lasuin & Nelson Lajuni <i>Faculty of Business, Economics and Accountancy, Universiti Malaysia Sabah^{1,2,3,5}</i>	62-68
7.	RESEARCH OVERVIEW ON INDUSTRY ANALYSIS AND HUMAN CAPITAL ASSESSMENT IN TOURISM INDUSTRY OF SABAH, MALAYSIA AND NORTH KALIMANTAN, INDONESIA	Datu Razali Datu Eranza ¹ , James M. Alin ¹ , Marso ² , Andy Lee Chen Hiung ¹ , Charlie Albert ¹ , Nelson Lajuni ¹ <i>¹Faculty of Business, Economics, and Accountancy, Universiti Malaysia Sabah ²Sekolah Tinggi Ilmu Ekonomi Bulungan, Tarakan, Indonesia</i>	69-81

8.	CREATIVE INDUSTRIES: AN OVERVIEW	Sorayah Nasip & Stephen Laison Sondoh Jr. <i>Faculty of Business, Economics and Accountancy Universiti Malaysia Sabah, Kota Kinabalu, Malaysia</i>	82-99
9.	TARIFF ON IMPORT OF PLASTIC WASTE	James Alin <i>Faculty of Business, Economics and Accountancy Universiti Malaysia Sabah</i>	115-120

EXTENDED ABSTRACT

NO	TITLE OF PAPER	AUTHOR/S	PAGE
1.	THE INTENTION TO EMBEZZLE THE FINANCIAL MANAGEMENT OF STUDENT INSTITUTIONS: GROUP CONFORMITY AND UNDERSTANDING OF TRIPANTANGAN	Dewi Kusuma Wardani & Maulidina Hima Pertamawati <i>Faculty of Economics, Universitas Sarjanawiyata Tamansiswa Yogyakarta, Indonesia</i>	100-102
2.	THE INFLUENCE OF DISCRIMINATION AND APPLICATION OF THE TRI NGA TEACHINGS ON INTENTIONS FOR TAX EVASION	Dewi Kusuma Wardani & Novika Lisa Setyaningsih <i>Faculty of Economics, Universitas Sarjanawiyata Tamansiswa Yogyakarta, Indonesia</i>	103-105
3.	THE RELATIONSHIP BETWEEN HUMAN RESOURCE MANAGEMENT MOTIVATION PRACTICES AND EMPLOYEE ENGAGEMENT IN UNIVERSITI MALAYSIA SABAH (UMS) IN KOTA KINABALU, SABAH	Nur Aqila Ammong, Beatrice Lim & Junainah Jaidi <i>Faculty of Business, Economic and Accountancy Universiti Malaysia Sabah</i>	106-108

ABSTRACT

NO	TITLE OF PAPER	AUTHOR/S	PAGE
1.	ECONOMIC GROWTH, UNEMPLOYMENT, POVERTY, AND ECONOMIC DISPARITY: HOW SABAH COMPARES TO THE NATIONAL AVERAGE.	Sarma Binti Aralas <i>Faculty of Business, Economic and Accountancy/Centre for Economic Development and Policy Universiti Malaysia Sabah</i>	109
2.	UNLOCKING THE POTENTIAL OF MOBILE APPS FOR BUSINESS FROM CONSUMER PERSPECTIVE: THE CASE OF DELIVERY SERVICES IN SABAH	Diana Nabila Chau Abdullah, Siti Hajar Samsu & Shafinaz Naim <i>Universiti Malaysia Sabah</i>	110

3.	ANALYSIS OF INCENTIVE MECHANISMS IN HUMAN RESOURCE MANAGEMENT OF CHINA UNICOM IN COVID-19 IN NINGXIA, CHINA	Zhang Xinyu, Roslinah Mahmud & Beatrice Lim <i>Faculty of Business, Economic and Accountancy</i> <i>Universiti Malaysia Sabah</i>	111
4.	THE SOCIO-DEMOGRAPHIC FACTORS AFFECTING OLDER PEOPLE'S LABOUR PARTICIPATION IN MALAYSIA	Khairul Hanim Pazim, Roslinah Mahmud, Noor Fzlinda Fabeil Juliana Langgat & Beatrice Lim <i>Faculty of Business, Economics and Accountancy; Centre for Economic Development and Policy (CDEP)</i> <i>Universiti Malaysia Sabah</i>	112
5.	EVALUATION STUDY OF SUSTAINABLE LIVELIHOOD ABILITY AMONG DOMESTIC MIGRANTS FROM POVERTY ALLEVIATION RELOCATION IN LIANGSHAN PREFECTURE, CHINA	Cai Changyan ¹ , Beatrice Lim ^{2*} & Kasim Mansur ² ¹ <i>Universiti Malaysia Sabah; Xichang University</i> ² <i>Faculty of Business, Economics and Accountancy; Centre for Economic Development and Policy (CDEP)</i> <i>Universiti Malaysia Sabah</i>	113
6.	FAKTOR YANG MEMPENGARUHI PENINGKATAN PRODUKTIVITI DALAM KALANGAN GURU SEKOLAH MENENGAH DI NEGERI SABAH	Abd. Kadir Bin Batong, Beatrice Lim, Kasim Mansur & Roslinah Mahmud <i>Faculty of Business, Economic and Accountancy</i> <i>Universiti Malaysia Sabah</i>	114

THE INFLUENCE OF TAX KNOWLEDGE AND TRINGA TEACHINGS ON THE OBEDIENT INTENTIONS OF PROSPECTIVE TAXPAYERS ONLINE BUSINESS ENTREPRENEURS

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Abstract

The increasing number of online businesses is not balanced with state income from the tax sector because online business entrepreneurs assume that online business has no tax obligations. This is due to the low knowledge of taxation and the implementation of *tringa* teachings so that tax compliance is not carried out properly. Taxpayer compliance is an action by taxpayers in fulfilling their tax obligations by laws and regulations consciously, honestly, completely, correctly, and on time. In the self-assessment system, initiatives and activities for calculating and collecting taxes are entirely in the hands of taxpayers. Taxpayer compliance needs to be improved and requires a moral and knowledgeable society, namely students as prospective taxpayers. This study aimed to affirm the influence of taxation knowledge and *tringa* teachings on the obedient intentions of prospective taxpayers of online business entrepreneurs. The research method uses descriptive quantitative with primary data questionnaires through a google form link to undergraduate students on Universitas Sarjanawiyata Tamansiswa. The results of the questionnaire distribution received 100 data from respondents that could be processed. The sampling method uses convenience sampling. The findings reveal that knowledge of taxation and *tringa* teachings had a positive effect on the compliance intentions of prospective taxpayers of online business entrepreneurs. All research objectives have been met. All respondents expressed positives and negatives about taxation knowledge and *tringa* teachings towards the compliance intentions of prospective taxpayers.

Keywords: Tax knowledge, teachings of *tringa*, obedient intentions of prospective taxpayers

1. INTRODUCTION

Tax is a mandatory contribution to the state that is coercive and owed to taxpayers by the legislation by not getting tax benefits directly. Tax is used to finance national development by improving the welfare of the people and enforcing fair laws for the sake of state order (Yulianti *et al.*, 2019). The COVID-19 pandemic has caused the MSMEs' economy to decline again not a few of the MSMEs' have gone bankrupt. These triggers pushed MSMEs to change their conventional sales strategy to digitalization by utilizing e-commerce and social media (Mirani *et al.*, 2022).

Kompas.com (2022) mentioned that until February 2022, there are already 17.25 million MSMEs connected in the digital ecosystem. Of the total 64 million

MSMEs, 17.25 million, or 27% of MSMEs have gone digital. Although the growth of online businesses is increasing, the growth is not offset by taxpayer compliance. The intangible online business makes many online business entrepreneurs unaware of their obligations as taxpayers and argues that selling using social media/e-commerce is not obliged to pay taxes (Nagoro, 2019). According to Fachirainy *et al.*, (2021), to improve taxpayer compliance in Indonesia need to require people who has a moral and has a tax knowledge so that they realize their obligations as taxpayers, namely complying with tax obligations by applicable regulations. These people are students who will work and have their income. So as prospective taxpayers, students need to have a strong intention to comply with tax obligations in the future.

According to Wardani & Rahmadini (2022), the obedient intentions of prospective taxpayers of online business entrepreneurs are influenced by several factors. The first factor is knowledge taxation. The Theory of Planned Behavior explains that a person's behavior is influence by the intention that pushes him to perform the action (Ajzen, 1991). Prospective taxpayers will act obediently if they have motivation and intentions that grow in the prospective taxpayer caused by knowledge of tax rights, obligations, and benefits (Ermawati & Afifi, 2018).

The second factor is the teaching of the *tringa* (Ayem & Hidayat, 2021). The Theory of Planned Behavior explains that the intention to obey prospective taxpayers does not arise only by understanding the tax rules, but also by feeling the benefits, rights, and obligations of taxation so that they can carry out (carry out) tax-compliant actions with knowledge mastered (Nufus & Irnawati, 2020). This means that a better understanding and implementation of *tringa* teachings in prospective taxpayers of online business entrepreneurs will encourage the growth of the intention to comply with tax obligations in accordance with tax regulations in a timely manner.

Based on the explanation before, the appropriate formulation of the problem in this study is whether tax knowledge has a positive effect on the obedient intentions of prospective taxpayers of online business entrepreneurs and whether *tringa* teachings have a positive effect on the obedient intentions of prospective taxpayers of online business entrepreneurs. The purpose of this study is to determine the influence of tax knowledge on the obedient intentions of prospective taxpayers of online business entrepreneurs, and the teachings of *tringa* affect the obedient intentions of prospective taxpayers of online business entrepreneurs.

2. LITERATURE REVIEW

2.1 Theory of Planned Behavior

Theory of Planned Behavior developed by Ajzen (1991) states that a person acts if pushed by motivation or intent to act taking into understanding the benefits obtained. Prospective taxpayers of online business entrepreneurs will realize and fulfill their tax obligations if they have good intentions to comply with their tax obligations (Ermawati,

2018). Taxpayer awareness is the cause of prospective taxpayers complying with tax regulations (Wardani & Rahayu, 2020).

2.2 Obedient Intentions of Prospective Taxpayers

The intention to comply with tax obligations is a manifestation of the desire of taxpayer to behave in compliance with tax. The obedient behavior of a taxpayer occurs because there has previously been an intention to comply with taxation (Suryani & Yushita, 2017). According to Saputri & Nuswantara (2021), Taxpayer compliance is an action by taxpayers in fulfilling their tax obligations in accordance with laws and regulations consciously, honestly, completely, correctly, and on time. In the self-assessment system, initiatives and activities for calculating and collecting taxes are entirely by taxpayers. Therefore, the success or failure of the implementation of taxes depends a lot on the taxpayer's self. Taxpayer compliance has a relationship with tax revenue because if compliance from taxpayers increases, indirectly state revenue from the tax sector will be greater (Wardani & Rumiyaun, 2017).

2.3 Tax Knowledge

Tax knowledge is information about tax regulations including tax laws and procedures that are used by taxpayers as a basis for acting and making decisions in carrying out their tax rights and obligations (Wardani & Rumiyaun, 2017). Good tax knowledge about e-commerce taxes can influence online business entrepreneurs in complying with their tax obligations. So that good tax knowledge will affect the obedient intentions of prospective taxpayers of online business entrepreneurs (Juwita *et al.*, 2021).

Established on the Theory of Planned Behavior, prospective taxpayers who have tax knowledge of tax rights, obligations, and benefits will comply with taxation (Ermawati & Afifi, 2018). This means that the higher level of taxation knowledge of prospective taxpayers, the more it will affect taxation compliance intentions. This research is in line with the research that has been carried out by Ermawati & Afifi (2018), Suryanti & Sari (2018), Yulianti *et al.*, (2019), Chanita & Sitinjak (2021), Dianartini & Diatmika (2021), Juwita *et al.*, (2021), and Soda *et al.*, (2021) stated that tax knowledge has a positive effect on taxpayer compliance. While this study is different from the results of the study by Wardani & Rumiyaun (2017), Ermawati (2018), Negara & Purnamasari (2019), and Handoko *et al* (2020) stated that tax knowledge has a negative effect on taxpayer compliance. Based on the explanation above, the following hypothesis can be drawn:

H.: *Tax knowledge has a positive effect on the obedient intentions of prospective taxpayers of online business entrepreneurs.*

2.4 *Tringa* Teachings

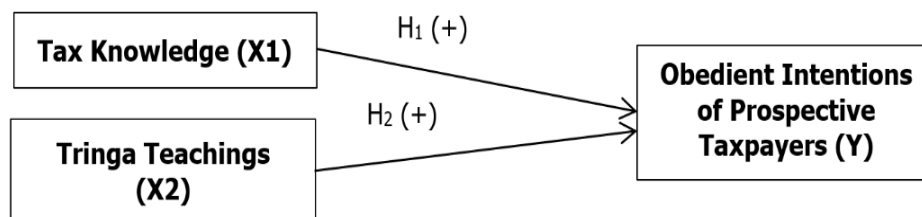
Wiryopranoto *et al.*, (2017) explained that *Tringa* Tamansiswa teachings is an educational concept taught by Ki Hadjar Dewantara since ancient times. *Tringa*'s teachings practically guidelines consisting of three activities, namely understanding (*ngerti*), feeling (*ngerasa*), and doing (*ngelakoni*). In line by the study from Nadziroh (2017), If someone already knows something, then should have a sense of wanting to do things that are by the knowledge he has. Not only to the point of wanting but should do, from the science possessed, for example, taxpayers who have tax knowledge fulfill their tax obligations.

Established on the Theory of Planned Behavior, the higher level of implementation and understanding of *tringa* teachings on tax regulations will affect the tax-compliant intentions of prospective taxpayers of online business entrepreneurs (Chanita & Sitinjak, 2021). This research is in line with the research that has been carried out by Nadziroh (2017), Nufus & Irnawati (2020), Ayem & Hidayat (2021), dan Wardani & Ice (2022) which states that good implementation of *tringa* will ignite students' enthusiasm for learning and achievements achieved. Based on the explanation above, the following hypothesis can be drawn:

H₂: *Tringa* teachings has a positive effect on the obedient intentions of prospective taxpayers of online business entrepreneurs.

2.5 Theoretical Framework

For the easiness of understanding these are the theoretical framework in this study:



Tax knowledge has a positive influence on the obedient intentions of prospective taxpayers of online business entrepreneurs. The better the tax knowledge that prospective taxpayers have, the better the ability to fulfill tax obligations. So that tax knowledge will affect the behavior of prospective taxpayers who run online businesses, namely the intention to comply with tax obligations.

The teachings of *Tringa* have a positive influence on the obedient intentions of prospective taxpayers of online business entrepreneurs. The better the implementation of *tringa* teachings in prospective taxpayers, the better the ability to fulfill tax obligations.

3. METHODOLOGY

3.1 Nature of Research

This research uses a quantitative approach or has numerical data with primary data types. Primary data is the data that is derived from the object of study (Gulo, 2002). This study used the dissemination of questionnaires through google form link. Quantitative data to be processed is obtained from the results of the distribution of questionnaires in the form of answers or responses to questions given to students from Universitas Sarjanawiyata Tamansiswa.

3.2 Population and Sample

The population in this study were students of Universitas Sarjanawiyata Tamansiswa. The sampling method uses convenience sampling. The research samples used were students of Universitas Sarjanawiyata Tamansiswa in the class of 2019, 2020, 2021, and 2022.

3.3 Data Collection Techniques and Instrument Development

This research uses a quantitative method, namely primary data obtained directly from the results of distributing questionnaires to students of Universitas Sarjanawiyata Tamansiswa. The research instrument used is a questionnaire with a *Likert scale* of 5 points, namely strongly agree, agree, neutral, disagree, strongly disagree. For the easiness of understanding these are the questionnaire indicators that used in the study:

Table 1: Questionnaire Indicators

Variabels	Indicators
Tax Knowledge (X1)	<ol style="list-style-type: none"> 1. Knowledge of tax rights and obligations (Wardani & Rumiyatun, 2017). 2. Knowledge in the general provisions of taxation (Widagsono, 2017). 3. Knowledge of NPWP (Taxpayer Identification Number) (Yuliani, 2019). 4. Knowledge of tax functions (Suryanti & Sari, 2018). 5. Knowledge of online business tax (Lubis & Sinaga, 2022). 6. Knowledge of tax sanctions (Suryanti & Sari, 2018).
Tringa Teachings (X2)	<ol style="list-style-type: none"> 1. Understanding (<i>Ngerti</i>) (Ayem & Hidayat, 2021). 2. Feeling (<i>Ngeraso</i>) (Ayem & Hidayat, 2021). 3. Actions (<i>Ngelakoni</i>) (Ayem & Hidayat, 2021)
Obedient Intentions of Prospective Taxpayers (Y)	<ol style="list-style-type: none"> 1. Intention to comply with tax provisions (Wardani & Rumiyatun, 2017). 2. Intention to register NPWP (Taxpayer Identification Number) (Yuliani, 2019). 3. Intention to report SPT (Annual Notification Letter) (Yuliani, 2019).

-
4. Intention to comply in calculating and paying taxes owed (Yuliani, 2019).
 5. Intention to comply in the payment of tax arrears (Yuliani, 2019).
-

3.4 Data Analysis Technique

Tabulation of data is performed with Microsoft Excel 2010 Software which is then processed using IBM SPSS version 20 program. The *pilot test* has been carried out on 33 respondents from Universitas Sarjanawiyata Tamansiswa students in the class of 2019, 2020, 2021, and 2022. The results of the *pilot test* validity and reliability test show was valid and reliable so that the questionnaire instrument can be used as a research measuring tool.

4. FINDINGS

4.1 DATA QUALITY TEST

The results of the validity test in this study showed that all items were valid. This can be proven by the *r-count* value $> r-table$ (0.195). The results of the reliability test showed that all items in the study were reliable. This is evidenced by the reliability value of the variable of tax knowledge showed the value of *Cronbach's Alpha* 0.900 > 0.60 , the variable of *tringa* teachings showed the value of *Cronbach's Alpha* 0.833 > 0.60 , and the variable of Obedient Intentions of Prospective Taxpayer shows the value of *Cronbach's Alpha* 0.901 > 0.60 . This proves that all indicators used are reliable, where an indicator is said to be reliable if it has *Cronbach's Alpha* value > 0.60 .

4.2 CLASSIC ASSUMPTION TEST

The classical assumption test that used in this study consisted of data normality test, heteroscedascity test, and multicollinearity test.

a. Data Normality Test

Data is considered normal if it has a significance value greater than 0.05. The results of the data normality test in this study used *one sample Kolmogorov Smirnov test*. The results of the data normality test showed an *asympt sig (2-tailed)* value of 0.152 > 0.05 , which means that the significance value is greater than 0.05 so that the results of the study proved that the data has been distributed normally.

b. Multicollinearity Test

The multicollinearity test aims to test whether a regression model found correlations between independent variables. The tools used are tolerance values and *VIF (Variance Inflation Factor)* value. The data is said to be free of multicollinearity if it has a tolerance value less than 0.10 (values above 0.10) and a *Variance Inflation Factor (VIF)* value greater than 10 (value below 10). The results of the Multicollinearity Test showed that the Tax Knowledge variable has a tolerance value of $0.390 > 0.10$ with a *Variance Inflation Factor (VIF)* value of $2.561 < 10$, the *tringa* teachings variable has a tolerance value of $0.390 > 0.10$ with a *Variance Inflation Factor (VIF)* value of $2.561 < 10$. The test results prove that all independent variables are free from multicollinearity problems.

c. Heteroscedasticity Test

The heteroskedasticity test is carried out to find out whether the research variables are free from heteroskedasticity or not. Data is said to be free from heteroskedasticity problems if it has a sig value greater than 0.05. The results of the Heteroskedasticity Test was showed that the Tax Knowledge variable has a *sig value* of $0.402 > 0.05$, and the *Tringa* Teaching variable has a *sig value* of $0.188 > 0.05$. The test results prove that all independent variables are free from the problem of heteroskedasticity.

4.3 Hypothesis Testing

The hypothesis testing used in this study consists of the Coefficient of Determinance (R^2) test, the F-test, and the T-test.

a. Coefficient of Determinance (R^2) test

The Coefficient of Determinance (R^2) test performed to test the size of independent variables that can describe dependent variables. The value of the coefficient of determination ranges from 0 to 1. The greater value of the coefficient of determination, the stronger relationship of the independent variable with the dependent variable. The results of the Coefficient of Determination Test (R^2) show that the value of *R square* is 0.639 or 63.9%. That is, the variables of Tax Knowledge and *Tringa Teachings* affect the Obedient Intentions of Prospective Taxpayers *Online* Business Entrepreneurs by 63.9%, while the remaining 36.1% are influenced by other factors outside the variables in this study.

b. F-Test

The F-test used the *ANOVA test (fit)* which shows whether an independent variable included in a research model had a *fit* effect on the dependent variable. F-test is assessed from the F-count greater than the F-table. The results of the F-test were showed that the Tax Knowledge variable has a *significance value* of $0.000 < 0.05$ and a calculated F value of $85.911 > F$ table 3.09. The test results prove that the variables of Tax Knowledge and Tringa Teachings have a significant effect on the Obedient Intentions of Prospective Taxpayers Online Business Entrepreneurs and can be said to be *fit*.

c. T-Test

The T-test is used to test whether an independent variable has a partial effect on the dependent variable assuming that if the *sig value* is greater than 0.05 then H_0 is accepted and if the *sig value* less than 0.05 then H_0 is rejected. The results of the T-Test show that taxation knowledge has a *sig value* of $0.005 < 0.05$ with a calculated T value of $2.847 > T$ table 1.985 and a *Standardized Coefficients Beta* value of 0.278. This result can be concluded that H_1 said the Tax Knowledge has a positive effect on the Obedient Intentions Prospective Taxpayers Online Business entrepreneurs, was accepted. The *Tringa* Teachings has a *sig value* of $0.000 < 0.05$ with a calculated T value of $5.773 > T$ Table 1.985 and a *Standardized Coefficients Beta* value of 0.563. This result can be concluded that H_2 said the *Tringa* Teachings has a positive effect on the Obedient Intentions Prospective Taxpayers Online Business entrepreneurs, was accepted.

5. DISCUSSION

a. Tax knowledge has a positive effect on the obedient intentions of prospective taxpayers of online business entrepreneurs.

Based on the results of the T-Test can be concluded that the Tax Knowledge has a positive effect on the Obedient Intentions Prospective Taxpayers Online Business entrepreneurs, was accepted. This is because the tax knowledge possessed by students as prospective taxpayers of online business entrepreneurs is relatively high, so the level of taxation knowledge possessed by prospective taxpayers will increase the intention to comply with their tax obligations.

This is in line with the Theory of Planned Behavior which explains that the intention of prospective taxpayers will influence behavior to comply with tax obligations and tax rules, because with good taxation

knowledge it will be considered by taxpayers by looking at the benefits of taxes. This research is in line with the research that has been carried out by Ermawati & Afifi (2018), Suryanti & Sari (2018), Yulianti *et al.*, (2019), Chanita & Sitinjak (2021), Dianartini & Diatmika (2021), Juwita *et al.*, (2021), and Soda *et al.*, (2021) stated that tax knowledge has a positive effect on taxpayer compliance. While this study is different from the results of the study by Wardani & Rumiya (2017), Ermawati (2018), Negara & Purnamasari (2019), and Handoko *et al.* (2020) stated that tax knowledge has a negative effect on taxpayer compliance.

b. *Tringa* teachings has a positive effect on the obedient intentions of prospective taxpayers of online business entrepreneurs

Based on the results of the T-Test can be concluded that the *Tringa* Teachings has a positive effect on the Obedient Intentions Prospective Taxpayers Online Business entrepreneurs, was accepted. This is because the *Tringa* Teachings possessed by students as prospective taxpayers of online business entrepreneurs is relatively high, so the level of *Tringa* Teachings possessed by prospective taxpayers will increase the intention to comply with their tax obligations.

The theory of planned behavior supports this research which explains that a good understanding and implementation of *tringa* teachings can affect the obedient intentions of prospective taxpayers of online business entrepreneurs. The better the *tringa* teachings are implemented in prospective taxpayers, the more it will encourage the intention to comply with tax regulations properly and on time. This research is in line with the research that has been carried out by Nadzirah (2017), Nufus & Irnawati (2020), Ayem & Hidayat (2021), dan Wardani & Ice (2022) which states that good implementation of *tringa* will ignite students' enthusiasm for learning and achievements achieved.

6. CONCLUSION

This study aims to prove the influence of tax knowledge and *tringa* teachings on the obedient intentions prospective taxpayers online business entrepreneurs. The study used a sample of Universitas Sarjanawiyata Tamansiswa students class of 2019, 2020, 2021, and 2022. Based on the questionnaire questionnaires through a google form link to undergraduate students on Universitas Sarjanawiyata Tamansiswa. The results of the questionnaire distribution received 100 data from respondents that could be processed. The findings reveal that knowledge of taxation and *tringa* teachings had a positive effect on the compliance intentions of prospective taxpayers of online business entrepreneurs.

This research has several limitations, so it is expected to be an input for future research. The limitations of this study are; this research only uses three

variables, namely tax knowledge, *tringa* teachings, and obedient intentions prospective taxpayers online business entrepreneurs; this research was only conducted on students of Universitas Sarjanawiyata Tamansiswa by only being able to collect a sample of 100 respondents, and this study only used questionnaires as the main data source of the study.

Based on the results of the data analysis research and conclusions, it is hoped that the next researcher will add variables so that they can find out other factors that can affect the compliance of prospective taxpayers of online business entrepreneurs and expand the scope of the research sample because the more respondents used, the better the research results, and subsequent researchers are expected to use data sources other than questionnaires such as interviews.

7. CONTRIBUTION/PRACTICAL IMPLICATIONS

The findings reveal and the discussion of each variable in the study, it was found that the *tringa* teaching variable had a positive effect on the obedient intentions of prospective taxpayers of online business entrepreneurs. That is, the teachings of *tringa* by Ki Hadjar Dewantara which contain the meaning of understanding (*ngerti*), feelings (*ngeroso*), and actions (*nglakoni*) that have been taught to students of Universitas Sarjanawiyata Tamansiswa can influence individual behavior in acting, understanding, and making decisions. It is hoped that this research can influence the obedient intentions of students as prospective taxpayers to have tax knowledge and good implementation of *tringa* teachings to comply with their tax obligations.

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THE INFLUENCE OF OPPORTUNITY AND PRESSURE ON FINANCIAL STATEMENT FRAUD DETECTION (A STUDY OF COMPANIES REGISTERED ON THE JAKARTA ISLAMIC INDEX)

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ABSTRACT

The goal of this research is to find out how many businesses will be included in the Jakarta Islamic Index from 2018 to 2021. Technique is the key to strength, and technique is the key to efficiency. The research method employed purposeful inspection, and 14 participants were chosen from a total of 56 participants. This study employs statistical descriptive analysis and hypotheses with a focus on regression analysis as the data analysis methodology. The stable financial pressure is positive if the report of financial fraud is negative. The amount of time spent determining financial viability cannot be used to assess the effectiveness of the research as a whole.

Keywords: pressure, opportunity, financial statement fraud

1. INTRODUCTION

Financial reports are a crucial means by which stakeholders and management can share information. One of the most crucial requirements is that financial reports be trustworthy. Because it could mislead the reader and be materially incorrect if it is not reliable, the information needs to be of high quality. Financial backers settle on conclusions about what was to come in view of the information in these monetary reports (Ulfah et al., 2017). Board organizations sometimes try to hide what happened so that financial results look good, especially by making fake financial announcements. This is because organizations place a high value on financial details.

When individuals, both employees and non-employees, seek personal or group gain that directly harms others, they are committing fraud. It is considered fraudulent financial reporting when management materially misrepresents financial reports, which can be harmful to investors and creditors (Ulfah, 2017).

(ACFE, 2019) carried out a survey, corruption accounts for 69.9% of fraud in Indonesia, followed by misuse of fund assets (20.9%) and financial statement fraud (9.2%). Even though the number is small, misrepresenting financial statements should be seriously considered to avoid bankruptcy.

In the capital market sector, there were instances of issuer financial statement manipulation at PT Garuda Indonesia, PT Kimia Farma, and PT Waskita Karya. Budi Istanto and Joko Mogoginta, two former directors of PT FKS Food Sejahtera Tbk (AISA), are in charge of the most recent financial report manipulation case. In an effort to boost sales and present an adequate picture of the company's performance, they accomplished this by increasing the receivables of six distributor businesses.

According to the Head of the Capital Market Legal Consultants Association (HKHPM), this case is a human fraud because the two defendants provided false information, even to the point of manipulating financial reports, in the news (<https://www.detik.com/tag/tiga-pilar-sejahtera> 2021).

There are a number of things that can affect fraudulent financial reporting, such as opportunities and pressures. A representation of pressure perspective is financial security. Financial stability refers to a company's financial stability (Dzakwan et al., 2019). Managers who commit fraud need to be driven or self-motivated. Number of the Statement of Auditing Standards (SAS) 99, when monetary, modern, and other ecological circumstances compromise monetary soundness and business productivity, supervisors are compelled to participate in bogus monetary revealing. This indicates that there is a positive link between pressure and false financial statements. Dzakwan et al. (2019), Jaunanda et al. (2020) as well as Khotimah et al. (2020) back this new study, which shows that pressure helps identify false financial statements. Then again, Purwaningtyas & Ayem (2021) and Nabila (2020) take a gander at past exploration which says that tension makes it more challenging to track down fiscal report misrepresentation.

An opportunity that allows for misrepresentation is called an opportunity. Someone can commit fraud if the company's monitoring system is less effective, evaluating effectiveness from an opportunity standpoint. Dzakwan et al., (2019) a situation in which a business has an efficient monitoring system to monitor its operational performance is referred to as effective supervision. Companies with efficient control systems are less likely to commit financial statement fraud. Nabila (2020), Khotimah et al. (2020) research demonstrates these open doors adversely affect the location of extortion in fiscal summaries. Kayoi & Fuad (2019) and Devi et al. (2021) on the other hand, research has shown that opportunity makes it easier to spot false financial statements.

The reason for this study is to discover how open doors and tensions impact budget report extortion recognition. Investors considering investing in sample companies can use the study's findings as a foundation for subsequent research in the same field.

2. LITERATURE REVIEW

2.1 Fraud Pentagon Theory

Aprilia (2017) describes the pentagon deception theory as an improvement on Crowe Howard's diamond and triangle deception theory from 2011. In 1953, Creese made the deception triangle theory. The deception triangle theory focuses on three aspects: opportunity, pressure, and rationalization Wolfe and Hermanson added a capability known as the "fraud diamond" factor in 2004. Crowe Howard added arrogance to the pentagon fraud theory. According to the pentagon fraud theory, there are five factors that contribute to fraud:

1. Pressure is the driving force behind fraud. This fraudulent act is typically the result of pressure from both financial and non-financial sources. According to Sihombing

(2014) the connection between fraud on financial statements and pressure has been established.

2. According to (Ayem & Wardani, 2023), opportunity occurs when individuals have the potential to misrepresent. Extraordinary open doors exist without command over individuals in the association and the climate in which deception will happen.
3. A person's attitude of rationalization is looking for reasons to commit fraud. If someone believes that their actions do not violate any laws or cause harm, they may commit fraud.
4. Capability, as defined by Ayem & Wardani, (2023), is the extent to which an individual can commit fraud within an organization. Extortion can't happen inside an association except if one is associated with somebody with adequate power. Debilitating inward controls can work with the event of extortion.
5. Arrogance is shown by someone who is certain of their ability to deceive others. This characteristic is the result of management's selfishness (great self-interest), which makes them even more arrogant. They will be led to believe that they will not be caught if they commit fraud and that the existing penalties will not apply to them.

2.2 Fraud

In accordance with SAS No.99, fraud is defined as deliberate conduct that causes the audited financial statements to contain a significant error. According to Ayem & Wardani (2023), fraud is fraud that occurs in businesses whose activities can cause every employee to commit fraud. This is because some businesses have systems that aren't always strict enough to prevent a lot of fraud.

2.3 Financial Statement Fraud

The ACFE defines financial statement fraud as the deliberate exaggeration or understatement of a company's financial condition with the intention of deceiving those who use the financial statements.

The SAS number 99 of different kinds of financial statement fraud, some of which are as follows:

- a. Changing the supporting archives of financial and accounting records;
- b. Financial statements with intentional omissions or errors;
- c. A violation of the principles of classification, quantity, presentation, or disclosure

2.4 The influence that pressure has on the detection of fraud in financial statements

This statement can be applied to virtually any industry, financial or not, as Agustin (2019) asserts that people commit fraud when under pressure. Financial

reporting pressure and fraud are linked, according to Sihombing (2014) findings. Management is pressured to allow financial statements to be manipulated when the company's performance is declining so that asset growth appears stable.

Financial stability is a good representation of pressure factors in this study. A condition that refers to a company's steady financial growth is referred to as "financial stability" in SAS No.99. The monetary dependability of an organization can be assessed utilizing the yearly resource development rate. Because assets are a reflection of a company's finances, the total asset comparison ratio is used to measure a company's financial stability (Sihombing, 2014). Financial statement fraud increases as a company's ratios fluctuate more, putting it under more pressure and making it more financially unstable. The findings of Elestine & Palupi (2019), which serve as the foundation for anticipating this positive impact and demonstrate that pressure in the form of financial stability reduces financial statement fraud. The following hypotheses can be tested in this study based on the previous description:

H1: Positive pressure on financial reporting fraud detection

2.5 The influence that opportunity has on the detection of fraud in financial statements

An opportunity is a situation in which there is a possibility of fraud and misinterpretation. Typically, the cause is a weak internal control system for detecting fraud (Smulowitz et al., 2019). The opportunity factor is described in this study through the use of efficient monitoring. Companies with effective or functional supervisory systems are less likely to engage in financial fraud because there are fewer opportunities for fraud. Opportunities proxied by effective supervision have a significant negative impact on fraudulent financial reporting, as found by Nabila (2020) research. The following hypotheses can be tested in this study based on the previous description:

H2: Opportunity's negative impact on the detection of false financial statements

3. METHODOLOGY

3.1 Nature of Research

With secondary data, this study employs quantitative data information and information sorting strategies. According to Sugiyono (2017), documents and other individuals are examples of sources of secondary data that do not directly provide data to data collectors. Researchers use financial reports from the Indonesia Stock Exchange that have been independently audited from 2018 to 2021 as secondary data.

3.2 Population and Sample

This study makes use of samples of annual financial reports from businesses that are listed on the Indonesia Stock Exchange (IDX) and the Jakarta Islamic Index (JII). The exploration test is the 2018-2021 organization yearly report and should be visible at www.idx.co.id The study sample includes 56 annual reports from 14 businesses. The researcher intends to disclose the data required for the research cycle in the current situation. The following businesses are utilized in this study:

No	Code	Name Company
1	ADRO	Adaro Energy Tbk.
2	ANTM	Aneka Tambang Tbk
3	BRPT	Barito Pacific Tbk.
4	EXCL	PT XL Axiata Tbk.
5	ICBP	Indofood CBP Sukses Makmur Tbk.
6	INCO	Vale Indonesia Tbk
7	INDF	Indofood Sukses Makmur Tbk
8	INTP	Indocement Tunggak Prakasa Tbk
9	KLBF	Kalbe Farma Tbk.
10	PTBA	Bukit Asam Tbk
11	TLKM	PT Telekomunikasi Indonesia (Persero) Tbk
12	UNTR	United Tractors Tbk
13	UNVR	Unilever Indonesia Tbk.
14	WIKA	Wijaya Karya Tbk

Table 1 Companies included in the list of the Jakarta Islamic Index

Purposive sampling of data based on predetermined criteria is used in this study. The following factors are considered:

Criteria	Number of Companies
The Jakarta Islamic Index includes the company in its list.	30
Companies that are always included in the 2018-2021 Jakarta Islamic Index calculations on the Indonesia Stock Exchange	14
In the 2018-2021 period companies that do not publish annual financial reports on the Indonesian Stock Exchange (IDX) website and company websites	0
Companies that are fully accessible (all data in publication period 2018-2021) but do not disclose data regarding research variables	0
Number of samples	14
Total sample 14 x 4 years	56

Table 2 Sample selection criteria

3.3 Development of research instruments

Detection of financial report fraud

Professor Messod Beneish used the Beneish Model to calculate fraud detection in financial reporting in his June 1999 paper. This is the study's dependent variable (Y). According to Beneish (2012), the Beneish M-Score is a method for analyzing financial reports that can be utilized to identify indications of fraudulent income reporting in financial statements. Using the equation that follows:

Beneish M-Score = $-4,84 + 0,528 \times \text{GMI} + 0,920 \times \text{DSRI} + 0,892 \times \text{SGI} + 0,404 \times \text{AQI} + 0,11 \times \text{DEPI} + 4,679 \times \text{TATA} - 0,172 \times \text{SGAI} - 0,327 \times \text{LVGI}$.

Pressure

Pressure can be calculated using the level of financial stability of the company, which reflects its performance. According to Skousen (2008), asset growth, which can indicate the movement of assets within a company, can be used to gauge financial stability. The term "total asset" refers to the company's current and non-current assets.

$$\text{AGROW} = \frac{\text{Total asset } t - \text{Total Asset } (t-1)}{\text{Total Asset } (t-1)}$$

Opportunity

Observing effectiveness is utilized to assess open doors. An organization that has great management is in a state known as the viability of its oversight. The level of effectiveness of the organization's supervision determines the extent to which it can reduce fraud (Khotimah et al., 2020). Internal controls flaw that make it easier to commit fraud. Sihombing (2014) suggests that, in order to better monitor management performance, businesses include an independent board of commissioners on the board. declare that the company is run by a board of directors that is independent and consists of at least 30% board members (Kusuma Wardani & Mursiyati, 2019).

Management will find it easier to commit fraud within the company if there is no adequate supervision or control because there will be opportunities for them to do so. Using an independent commissioner to oversee the business is one option (BDOUT). The formula for determining how effective supervision is:

$$\text{BDOUT} = \frac{\text{Number of independent commissioners}}{\text{Total board of commissioners}}$$

4. FINDING

4.1 Descriptive statistical analysis

<i>Descriptive Statistics</i>					
	N	Minimum	Maximum	Mean	Std. Deviation
AGROW	56	-,107	1,676	,11102	,253013
BDOUT	56	,167	,833	,41118	,144545
Pendeteksian Kecurangan Laporan Keuangan	56	-5,101	,115	-2,58536	,757791
Valid N (listwise)	56				

Table 3 Descriptive statistical analysis

The Beneish M-Score method's average value for the financial statement fraud detection variable (Y) is -2.58536, as determined by the aforementioned analyst test. Exhibits that the Jakarta Islamic List's organizations face a 25% opportunity of budget report misrepresentation. With a standard deviation of 0.757791, PT XL Axiata received the lowest score in 2019, which was 5.101. PT XL Axiata, on the other hand, has the highest 2020 score, 0.115.

The financial stability proxy (AGROW) measures the pressure variable, and companies in the Jakarta Islamic Index have a mean (average) value of 11.1% for it. a standard Because it is higher than the mean and has a deviation of 0.253013, the pressure variable has a high distribution variance during the review period. In 2020, the pressure variable for PT Indofood Sukses Makmur is 1.676, while the pressure variable for PT United Tractors is -0.107.

The supervision effectiveness proxy (BDOUT) measures the opportunity variable at a mean (average) value of 0.41118, indicating that 41.1% of businesses in the Jakarta Islamic Index are effectively supervised. Because its value is lower than the average, the probability variable has a lower variance throughout the study period with a standard deviation of 0.144545. The open-door variable at PT Bukit Asam Tbk has a base worth of 0.167. In 2019, 2020, and 2021, the company Unilever Indonesia Tbk will have a maximum value of 0.833.

The extortion identification variable the fiscal summaries (Y) estimated utilizing the Beneish M-Score strategy has a mean (normal) worth of - 2.58536 which demonstrates that the gamble of organizations in the Jakarta Islamic List committing demonstrations of misrepresentation is 25%, as displayed in factual tests expressive above. This calculation has a standard deviation of 0.757791, with the XL Axiata Tbk organization using the lowest value, 5.101, in 2019. In contrast, XL Axiata Tbk's 0.115 in 2020 is the highest value.

The mean (average) of the pressure variable as measured by the financial stability proxy (AGROW) is 0.11102, which indicates that companies on the Jakarta Islamic Index have an average financial stability of 11.1%. Standardized pressure variable with a deviation of 0.253013, the pressure variable had a high distribution variance during the study period because it was higher than the mean. The pressure variable for the United Tractors Tbk company in 2020 is -0.107, while the pressure variable for the Indofood CBP Sukses Makmur Tbk company is 1.676.

The opportunity variable's mean value (average) of 0.41118, as measured by the supervision effectiveness proxy (BDOUT), indicates that companies on the Jakarta Islamic Index are being monitored at a rate of 41.1 percent. A standard is in the opportunity variable. Because its value is lower than the mean, the opportunity variable's distribution has a lower variance during the study period, with a deviation of 0.144545. The minimum value for the Bukit Asam Tbk opportunity variable in 2019 is 0.167. The maximum value for PT Unilever Indonesia Tbk is 0.833 in 2020 and 2021.

4.2 Classical Assumption Test Results

Normality test

One-Sample Kolmogorov-Smirnov Test

		<i>Unstandardized Residual</i>
N		56
<i>Normal Parameters^{a,b}</i>	<i>Mean</i>	0E-7
	<i>Std. Deviation</i>	,71139018
	<i>Absolute</i>	,155
<i>Most Extreme Differences</i>	<i>Positive</i>	,155
	<i>Negative</i>	-,093
<i>Kolmogorov-Smirnov Z</i>		1,158
<i>Asymp. Sig. (2-tailed)</i>		,137

Table 4 Normality Test Results

Residual data have a normal distribution of $0.137 > 0.05$, as shown in table 4, as indicated by the two-tailed Asymp sig value of 0.137. In light of this, the model's residual regression data exhibit a normal distribution.

Multicollinearity Test

Coefficients^a

Model	<i>Collinearity Statistics</i>	
	<i>Tolerance</i>	VIF
1	AGROW	,999
	BDOUT	,999

Table 5 Test Results

All variables with tolerance values less than 0.010 have a VIF value of <10 , as shown in table 5 above. The tolerance values pressure and opportunity variables are 0.999 and 1.001 VIF values, respectively. Because of this, the research regression model finds no correlation between these independent variables.

Autocorrelation Test

Runs Test

	<i>Unstandardized Residual</i>
<i>Test Value^a</i>	,01320
<i>Cases < Test Value</i>	28
<i>Cases \geq Test Value</i>	28
<i>Total Cases</i>	56
<i>Number of Runs</i>	32
<i>Z</i>	,809
<i>Asymp. Sig. (2-tailed)</i>	,418

Table 6 Autocorrelation Test Results

The autocorrelation test results for Asymp Sig values are presented in Table 6 above. 2-tailed) 0.418, indicating a value less than or equal to 0.05. This study's findings indicate that no autocorrelation symptoms exist.

Heteroscedasticity Test

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-1,701	,709		-2,398	,020
1 AGROW	1,022	,924	,149	1,106	,274
BDOUT	-1,450	1,618	-,121	-,896	,374

Table 7 Heteroscedasticity Test Results

The fact that each independent variable has a significance level that is less than 0.05 lends credence to the heteroscedasticity test's findings, as shown in Table 7. It is possible to use the regression model, and heteroscedasticity is assumed to be absent.

4.3 Hypothesis Testing and Data Analysis

F test

ANOVA^a					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	3,749	2	1,875	3,570	,035 ^b
1 Residual	27,834	53	,525		
Total	31,584	55			

Table 8 F test results

The calculated f value for the F test is 3.570, and the probability is 0.035, which indicates that the probability value is $0.035 < 0.05$, as shown in table 8. It is possible to draw the conclusion that one of the pressure and opportunity variables has an impact on the fraud detection variable in financial reporting. That is, the model called Fit.

Determination Coefficient Test (R²)

Model Summary^a				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,345 ^b	,119	,085	,724688

Table 9 Determination Coefficient Test Results

The magnitude of the coefficient of determination is 0.119, or 11.9%, as shown in table 9. As a proxy for detecting fraud in financial statements, it is known that the pressure variable (AGROW) and the opportunity variable (BDOUT) can each contribute 11.9% to the dependent variable. As many as 88.1% (100-11.9%) variables have an effect outside of the research model.

T partial test

Coefficients-					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-2,835	,296		-9,562	,000
1 AGROW	1,009	,386	,337	2,611	,012
BDOUT	,334	,676	,064	,494	,624

Table 10 Test Results t

The Hypothesis 1 test shows that pressure makes it easier to spot fraud in financial statements. Table 10 displays that the standardized coefficients (beta) have a t-count value that is greater than the t-table value of 1.673, a sig value of 0.012, and based on the results of data processing with sig values of 0.012 or 0.05 or higher. As a result, identifying received fraudulent financial statements is impacted by pressure.

This study's discoveries are reliable with the Extortion Pentagon Hypothesis, which gives a clarification to pressure, especially the desire to commit misrepresentation. When a company's performance declines, management must make adjustments to financial reports in order to maintain steady asset growth. This indicates that if an organization's resource growth reflects what is happening, it has a greater chance of offering false financial statements. A high annual asset growth ratio may indicate that management is attempting to stabilize volatile financial reports by managing earnings. This is due to the fact that investors do not always desire stable market conditions, so management commits fraud to maintain the company's stability to please investors.

The Hypothesis 2 test's findings, opportunities that make it harder to spot fraud in financial statements. In table 10, the standardized coefficient (beta) is 0.334, the significance value is 0.624, and the calculated t value is 0.494. The aforementioned data processing results reveal a significance level that is 0.624 times greater than 0.05. That is to say, the opportunity has no effect on the fraud detection capabilities of the financial statements. Since the likelihood variable speculation, which is watched out for by administrative ability impacts the revelation of expenditure plan report pressure, H2 is unacceptable. This is because it is less likely that the sample companies' financial reports are false because they have adequate or good oversight. This demonstrates that the detection of false financial statements is unaffected by chance. This is because the sample companies have adequate or good supervision, so there is little chance of fraudulent financial reporting.

This study's findings are consistent with the Fraud Pentagon Theory, which defines opportunity as a situation in which fraud is likely to occur. This could imply that a high level of oversight will make it less likely for financial reporting to be false (Ayem & Wardani, 2023). This indicates that fraudulent financial statements are less likely to occur in businesses with an efficient or very good audit system because the opportunity to do so is also smaller.

5. CONCLUSIONS

From 2018 to 2021, this study will look at how opportunities and pressure affect the identification of financial statement fraud in companies listed on the Jakarta Islamic Index. 14 precedent organizations are created using a precedent with predetermined rules in this study. In contrast to opportunity, this study found that pressure has no effect on financial statement fraud detection.

There are still a few limitations to this study, including: Because the research period is only four years, from 2018 to 2021, the data used pay little attention to the company's state. Only 25% of the variables tested in this study can be explained by data, and the remaining variables are influenced by external factors. The following criteria must be met 14 (fourteen) businesses that were included in the Jakarta Islamic Index between the years 2018 and 2021 were chosen as the study's samples. Despite the fact that fraud detection in financial statements has received relatively little research, the Beneish M-score was used to evaluate fraud detection in this study. On the basis of the financial statements and the Beneish M-score method. From 2018 to 2021, this study examines how supporter organizations of the Jakarta Islamic List distinguish false budget summaries in terms of opportunity and tension.

Some suggestions for additional research are as follows: It is anticipated that the research will continue for an additional four (4) years in order to guarantee that the data used more accurately reflects the actual situation of the company. It is anticipated that additional variables influencing fraudulent financial reporting will be included in subsequent research. Includes, as guiding factors, the review board, productivity, monetary quality, and company size. The sampling criteria should be changed, or new categories of companies should be used in future research. The outcomes can be compared to one another and used as a benchmark. It is anticipated that additional research on fraudulent financial statements will be conducted in the future using the Beneish M-score and additional references.

5. CONTRIBUTION/PRACTICAL IMPLICATIONS

When making investment decisions, investors are expected to take this research into account. Investors should pay close attention to the influences of pressure and opportunity on the occurrence of fraudulent financial statements.

The purpose of this study is to provide management of a business with insight into the long-term consequences of making false financial statements, which may include declaring bankruptcy, and to shed light on the factors that contribute to financial statement fraud.

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THE INFLUENCE OF MOTIVATION AND UNDERSTANDING OF TAMANSISWA TEACHING "OPOR BEBEK MENTAS SAKA AWAKE DHEWE" ON INTENDED ENTREPRENEURSHIP INTENTION

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Abstract

The purpose of this study was to find out whether the motivation and understanding of Tamansiswa's teachings "*Opor Bebek Mentas Saka Awake Dhewe*" had an effect on entrepreneurial intentions. This study used a quantitative method by distributing questionnaires consisting of 117 respondents from Tamansiswa Bachelor University students. Hypothesis testing using multiple linear regression statistical methods. The results of the study show that motivation has a positive effect on entrepreneurial intentions, and understanding of Tamansiswa's teaching "*Opor Bebek Mentas Saka Awake Dhewe*" has a positive effect on entrepreneurial intentions.

Keywords: Motivation, Understanding of Tamansiswa Teachings "*Opor Bebek Mentas Saka Awake Dhewe*", Entrepreneurial Intention

INTRODUCTION

Every college graduate has a hope to be able to apply the knowledge they have acquired during their studies as a choice for a profession. There are several options for college graduates who have completed their studies. First, become an employee or employee in a private or state company. Second, open your own business (entrepreneurship) in a field according to the knowledge you got while in college. Third, being unemployed because of difficult and fierce competition or reduced employment according to the background of the study (Widyanto et al., 2019) .

Several possibilities, the second choice that might be an alternative choice for college graduates. The choice for entrepreneurship is the right choice, because being a civil servant or private is very difficult because there are so many competitors and increasingly fierce competition in finding work. Another reason is that by becoming an entrepreneur you can try to determine your own product, create new motivation in trading, and create job opportunities for others (Agung & Sumaryanto, 2018).

The phenomenon of student entrepreneurship is proven by the presence of Undip vocational students who started a fashion & gift business. Dhita Putri, a student from Sukoharjo, Central Java, really likes entrepreneurship and has the capital to earn her own income in her spare time. He has been in business since the start of the Covid-19 pandemic and owns a fashion and souvenir shop (Balqis, 2022.) .

Motivation is the background for individuals to act to achieve certain goals. (Giantari & Ramantha, 2019) . Motivation can come from oneself or from others (Alifia & Dwiridotjah, 2019) . Motivation that comes from oneself includes encouragement,

self-desire to find out information and understanding, opinion on certain skills, develop attitudes, enjoy life and others. Meanwhile, motivation that comes from other people includes work situations and environments, policies, and problems at work such as: awards, promotions, and responsibilities (Mediatrrix & Sari, 2017) . Motivation is needed for students to become entrepreneurs in order to be able to identify business opportunities, then take advantage of these opportunities to create new job opportunities (Sumadi & Sulistyawati, 2017) .

Opor bebek mentas saka awake dhewe means to live independently without relying on the help of others. Tamansiswa bases its way of life on the duck soup system, finances its life from its own business (Regina, 2014) . This means that being an entrepreneur must have the courage to live independently, not depend on other people, and dare to make a living from the results of his own income. Thus, university graduates are expected to be able to participate in building employment opportunities by entrepreneurship to reduce unemployment. There are two research purposes. First, to find out whether motivation has a positive effect on entrepreneurial intentions. Second, to find out whether the understanding of " *Opor Bebek Mentas Saka Awake Dhewe* " has a positive effect on entrepreneurial intentions.

LITERATURE REVIEW

Theory of Planned Behavior

Theory of planned behavior explains the behavior carried out by an individual. A person's attitude or behavior is controlled by himself, so it is necessary to control behavior that can affect intentions and behavior (Kristiani, 2017) . Theory of planned behavior is very suitable to be used to explain entrepreneurial intentions which is a development of Theory of Reasoned Action (TRA) which explains that a person's intention or desire is formed by two factors, namely attitude towards behavior and subjective norms (Nu'man & Noviaty, 2021) . This theory is also related to Tamansiswa's teachings " *opor bebek mentas saka awake dhewe* ", where one's intention to become an entrepreneur needs to be planned.

Push and Pull Theory

Push theory is an individual encouragement for entrepreneurship, due to negative encouragement, namely job dissatisfaction, difficulty finding work, inappropriate working hours or inappropriate salary. Meanwhile, pull theory is the behavior of individuals who are interested in entrepreneurship because they are looking for things related to entrepreneurial characteristics (Irawati & Sudarsono, 2020). According to Gilad and Levine (2018) Push and Pull Theory is a theory related to motivation to become an entrepreneur, where a person will be interested and motivated to do entrepreneurship due to certain factors.

Entrepreneurial Intentions

Entrepreneurial intention is an attempt to establish a business, take or control risks, and use various resources that are operated efficiently to gain profit (Wardani et al., 2021). The intention to start entrepreneurship is an important indicator of the entrepreneur's commitment to the entrepreneurial process. These are factors that

must be considered when studying the entrepreneurial process in setting up a new business (Listyawati, 2020).

Motivation

Motivation is also called the drive in humans that makes someone do something. Entrepreneurial motivation is an impulse that arises from someone to start or carry out an activity related to the field of entrepreneurship. Entrepreneurial motivation is not born, but entrepreneurial motivation can be trained, studied and developed (Sintya, 2019). Entrepreneurial motivation refers to the motivation of entrepreneurs to seek opportunities in the market to obtain resources, knowledge, experience, obtain financing and reduce risk (Listyawati, 2020).

Understanding Tamansiswa Teachings "*Opor Bebek Mentas Saka Awake Dhewe*"

Opor bebek mentas saka awake dhewe means that when the duck is cooked it will be cooked and release its own oil without relying on oil or margarine. This teaches us to strive for what is our life goal without relying on/expecting the help of others (Kejawen, 2015). The implementation of these teachings is in the form of being independent in economic terms, namely by entrepreneurship (Hutami et al., 2019). An entrepreneur must have the courage to live independently, to finance his life with his own results (Logandeng, 2021).

Hypothesis Development

The Effect of Motivation on Entrepreneurial Intentions

Motivation is in the form of effort that can make someone do something to achieve goals and get satisfaction (Putry et al., 2020). With encouragement, the individual can determine what business he will take. High entrepreneurial motivation must be owned by every individual who wants to become an entrepreneur, because high entrepreneurial motivation will be able to shape their mindset and mentality to always try to excel in every business (Dwiridotjah, 2019).

Research conducted by Giantari & Ramantha (2019) states that motivation has a positive effect on entrepreneurial intentions. Motivation encourages individuals to improve their abilities and skills, including adding insight related to future career development. The higher the motivation, the more it fosters individual intentions to entrepreneurship (Sumadi & Sulistyawati, 2017). Based on this description, it can be concluded that the hypothesis is as follows:

H1: Motivation has a positive effect on entrepreneurial intentions.

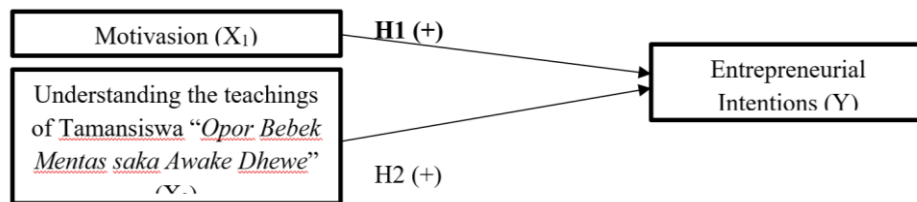
The Effect of Understanding Tamansiswa Teachings "*Opor Bebek Mentas Saka Awake Dhewe*" on Entrepreneurial Intentions

Understanding the teachings of Tamansiswa "*Opor Bebek Mentas Saka Awake Dhewe*" teaches that an entrepreneur is expected to have an independent attitude in managing his business, that is, not to depend on other parties in making decisions or acting, including meeting his business needs (Tamalla, 2021). This factor will have a positive influence if students are able to understand the meaning of "*opor bebek mentas saka awake dhewe*". Which means that being an entrepreneur must have the courage to live independently, not depend on other people, and dare to make a living

from the results of his own income. Thus college graduate students are expected to be able to participate in building employment opportunities by entrepreneurship and reducing unemployment (Hutami et al., 2019). Based on this description, the hypothesis can be concluded as follows:

H2: Understanding of Tamansiswa's teachings "*Opor Bebek Mentas Saka Awake Dhewe*" has a positive effect on entrepreneurial intentions.

Figure 1.1
Framework of thinking



RESEARCH METHODS

This research was conducted using a descriptive quantitative approach. The data used in this study are primary data obtained from distributing questionnaires to students at the Tamansiswa University of Yogyakarta. Data collection was carried out in November 2022. This study used multiple linear regression analysis. Multiple linear regression analysis was carried out to determine the effect of motivation and understanding of Tamansiswa's teachings "*Opor Bebek Mentas Saka Awak Dhewe*" on entrepreneurial intentions.

Table 1.2

Operational Definition and Research Variable Indicators

Variable	Operational Definition	Indicators	Research Questionnaire
Motivation (Anggraini & Suryoko, 2018)	Motivation is a state in a person's personality that encourages the individual's desire to carry out certain activities in order to achieve goals (Anggraini & Suryoko, 2018)	1. Hard work (Aini, 2020) 2. The attitude of never giving up (Aini, 2020)	1. (+) I am motivated to become an entrepreneur because I see people working hard. 2. (+) I am motivated to become an entrepreneur when people are enthusiastic about working. 3. (+) I believe that if you want to be a successful entrepreneur, you have to instill the thought of never giving up.

			4. (+) Entrepreneurship teaches me about never giving up to achieve success.
		3. Have commitment (Aini, 2020)	5. (+) I believe that when I work, I have to have a commitment to work. 6. (+) I have a high commitment to achieve the success of a business.
Understanding the teachings of Tamansiswa "opor bebek mentas saka awake dhewe" (Hutami et al., 2019)	The understanding of Tamansiswa's teachings "Opor Bebek Mentas Saka Awake Dhewe" teaches the principle of independence which can motivate a person to achieve his goals with his own abilities (Hutami et al., 2019).	1. Independent attitude (Wijayanto, 2020) 2. How to make decisions (Wijayanto, 2020) 3. Responsibility (Wijayanto, 2020)	7. (+) I am able to push myself to have a better personality or behavior when I experience failure in seeking business opportunities. 8. (+) I feel satisfied getting my own results through entrepreneurship. 9. (+) I have the ability to solve problems. 10. (+) I always think before making a decision. 11. (+) I have the ability to accept the consequences of all the decisions I make. 12. (+) I am ready if in the future my business suffers a loss
Entrepreneurial Intentions (Pratama, 2021)	Entrepreneurial intention is an attitude of determination possessed by someone to do entrepreneurship with a specific purpose (Pratama, 2021)	1. Dare to take risks (Risnawati, 2017) 2. Creative (Risnawati, 2017) 3. Confident and optimistic (Risnawati, 2017) 4. Leader spirit (Risnawati, 2017).	13. (+) I believe entrepreneurship is the right decision. 14. (+) I dare to take risks in entrepreneurship. 15. (+) Creativity in entrepreneurship is needed. 16. (+) Creativity in entrepreneurship is the main capital in running a business. 17. (+) An entrepreneur must have strong self-confidence. 18. (+) Lack of confidence will have a negative impact on entrepreneurship. 19. (+) The attitude of a leader must be owned by an entrepreneur.

20. (+) In the world of business, leadership is a must

RESULTS AND CONCLUSION

Data Quality Test

Based on the results of the answers to the statements, a data quality test was carried out in this study. All variables are considered valid and reliable so that further tests can be carried out.

Descriptive Statistics Test

Table 1.3
Descriptive Statistics Test
Statistics

		Total_X1	Total_X2	Total_Y
N	Valid	117	117	117
	Missing	0	0	0
	Mean	27,38	26,25	35,89
	Median	28,00	26,00	37,00
	Std. Deviation	2,732	2,985	3,676
	Variance	7,463	8,912	13,513
	Minimum	19	20	25
	Maximum	30	30	40

Based on table 1.4 it is known that:

1. Variable motivation (X1) with a total of 117 respondents who have a minimum value of 19, a maximum value of 30, a mean value of 27.38, and a standard deviation value of 2.732.
2. The variable understanding of Tamansiswa's teaching "*opor bebek mentas saka awake dhewe*" (X2) with a total of 177 respondents has a minimum value of 20, a maximum value of 30, a mean value of 26.25, and a standard deviation value of 2.985.
3. The variable of entrepreneurial intention (Y) with a total of 117 respondents has a minimum value of 25, a maximum value of 40, a mean value of 35.89, and a standard deviation value of 3.676.

Classic assumption test

Table 1.4
Normality Test Results

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		117
Normal Parameters ^{a,b}	Mean	0E-7
	Std. Deviation	2,22352547
Most Differences	Extreme Absolute Positive	,125 ,048

	Negative	-,125
Kolmogorov-Smirnov Z		1,348
Asymp. Sig. (2-tailed)		,053

The normality test can be said to be normally distributed with the condition that the value is significant or the Asymp.Sig value. (2-tailed) more than 0.05. Table 1.1 shows that the results of the normality test have a significance value or Asymp.Sig. (2-tailed) of 0.053, it can be concluded that the test is normally distributed.

Table 1.5
Multicollinearity Test Results

Model	Coefficients ^a						Collinearity Statistics	
	Unstandardized Coefficients		Standardize d Coefficients	t	Sig.	Toleranc	VIF	
	B	Std. Error	Beta					
1	Constant	5,157	2,228		2,315	,022		
	Total_X1	,552	,094	,410	5,867	,000	,656	1,524
	Total_X2	,595	,086	,483	6,905	,000	,656	1,524

Based on table 1.2, it is known that the results of the multicollinearity test of the independent variables which show the value of the Variance Inflation Factor (VIF) is less than 10, it can be said that there is no multicollinearity.

Table 1.6
Heteroscedasticity Test Results

Model	Coefficients ^a			T	Sig.	
	Unstandardized Coefficients		Standardized Coefficients			
	B	Std. Error	Beta			
1	(Constant)	5,041	1,385		3,640	,000
	Total_X1	-,083	,059	-,160	-1,417	,159
	Total_X2	-,041	,054	-,085	-,758	,450

Based on table 1.3 it is known that the heteroscedasticity test of each variable has a probability value above 0.05, so the test results are said to have no heteroscedasticity.

Hypothesis testing

Table 1.7
Model Fit Test Results
ANOVA^a

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	994,044	2	497,022	98,796	,000 ^b
Residual	573,512	114	5,031		
Total	1567,556	116			

Based on table 1.4 from the fit model test, it is known that the probability is .000 which is smaller than the p value which is equal to 0.05 and the calculated F value is 98.796 > F table 3.08, so it can be concluded that one of the independent variables influences entrepreneurial intentions.

Table 1.8
Coefficient of Determination Result (Adjusted R²)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,796 ^a	,634	,628	2,243

Based on table 1.5 it can be seen that the R value of 0.796 is greater than 0.654, and the adjusted R square value is 0.628. This explains that the magnitude of the influence of motivation and understanding of Tamansiswa's teachings "Opor Bebek Mentas Saka Awake Dhewe" on entrepreneurial intentions is 62.8%, while the rest is influenced by other variables not used in this study, namely 37.2%.

Table 1.9
T test results
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	5,157	2,228		2,315	,022
1 Total_X1	,552	,094	,410	5,867	,000
Total_X2	,595	,086	,483	6,905	,000

Based on the results of the t test in table 1.6 it can be concluded that:

1. Variable motivation (X1) obtained t count of 5.867, standardized beta coefficient of 0.410, significance value below 0.05, namely 0.000, obtained t table of 1.980. Based on these results showing 5.867 > 1.980 and 0.000 < 0.05, it can be concluded that motivation has a positive effect on entrepreneurial intentions.
2. The variable understanding of Tamansiswa's teachings "Opor Bebek Mentas Saka Awake Dhewe" (X2) obtained t count of 6.905, standardized coefficient beta of 0.483, significance value below 0.05, namely 0.000, obtained t table of 1.980. Based on these results showing 6.905 > 1.980 and 0.000 < 0.05, it can

be concluded that understanding Tamansiswa's teachings "Opor Bebek Mentas Saka Awake Dhewe" has a positive effect on entrepreneurial intentions.

Discussion

The Effect of Motivation on Entrepreneurial Intentions

The results of testing the hypothesis of motivation affect entrepreneurial intentions. This result is evidenced by the t test value where the standardized beta coefficient is 0.410 and the significance level is below 0.05 which is 0.000, so the results of the first hypothesis show that motivation has a positive effect on the entrepreneurial intentions of students at the University of Bachelor of Science Tamansiswa Yogyakarta. This is because the motivation possessed by students is high so that it can affect entrepreneurial intentions.

In addition, it can be seen from the number of respondents who answered strongly agree with the statement "entrepreneurship teaches me about never giving up to achieve success". This means that students realize that an entrepreneur must have a never giving up attitude because never giving up will make someone not give up with the conditions that will be experienced in the future. Students who have good entrepreneurial motivation will have an unyielding attitude in running their business. The results of this study are in line with research conducted by Aini (2020) which states that motivation has a positive effect on student interest in entrepreneurship.

The Influence of Understanding Tamansiswa Teachings "*Opor Bebek Mentas Saka Awakw Dhewe*" Against Entrepreneurial Intentions

The results of testing the hypothesis of understanding Tamansiswa's teachings "*Opor Bebek Mentas Saka Awake Dhewe*" have an effect on entrepreneurial intentions. This result is proven by the t test value where the standardized beta coefficient is 0.483 and the significance level is below 0.05 which is 0.000, so the results of the first hypothesis show that understanding Tamansiswa teachings "*Opor Bebek Mentas Saka Awake Dhewe*" has a positive effect on the entrepreneurial intentions of Bachelor University students. Tamansiswa Yogyakarta. This is because the understanding of Tamansiswa's teachings "*Opor Bebek Mentas Saka Awake Dhewe*" is relatively high so that it can affect entrepreneurial intentions.

In addition, it can be seen from the number of respondents' answers who agreed to the statement "creativity in entrepreneurship is the main capital in running a business". This means that individuals must develop their creativity to start a business. The better the creativity you have, the more people will be interested in the business.

Conclusion

Based on the results of the research and discussion conducted, it can be concluded that motivation and understanding of Tamansiswa's teachings "*Opor Bebek Mentas Saka Awake Dhewe*" has a positive effect on entrepreneurial intentions.

Suggestion

For future researchers, it is advisable to expand the factors and samples in the study, because in fact there are many driving factors for growing entrepreneurial intentions.

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SHOULD HIGHER EDUCATION INSTITUTIONS CONTRIBUTE TO THE IMPLEMENTATION OF CIRCULAR ECONOMY AND SUSTAINABLE DEVELOPMENT? A REVIEW

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Abstract

Currently the world is facing environmental problems that require serious efforts at the global level. One of the efforts made by the global community to create a better quality of human life is through the Sustainable Development Goals (SDGs). Sustainable development is part of the efforts in the SDGs in maintaining various aspects such as economic and social aspects related to environmental aspects. One of the efforts made by the government in overcoming environmental problems is the circular economy (CE). Currently, research on circular economy issues and the role of higher education institutions is becoming a concern in various parts of the world. One of the driving factors is because environmental problems are currently an actual and essential topic. Environmental degradation has become one of the proofs that human activities have a direct impact on environmental preservation, including the environment in Indonesia. However, in Indonesia studies on the circular economy and its relation to higher education are still rare. The purpose of this narrative review is to find out the role of tertiary institutions in supporting the implementation of CE, and find out the supporting and inhibiting factors as well as explaining the model of implementing CE in higher education. The narrative review method consists of compilation, tabulation, comparison of research results, and summarizing. The writers conducted a literature review study by collecting articles from reputable international journal sites such as Emerald, Elsevier, Springer, Routledge and MDPI. After searching for research on keyword criteria, 50 articles were taken as a sample. The results show that CE has a relationship with SD. Universities play a strategic role in implementing SD and CE through Tri Dharma activities, which are teaching, research and community service. In this study, it was found that there are encouraging and inhibiting factors in the implementation of CE in tertiary institutions. Universities in Italy, Finland and Poland have taken concrete action by providing CE programs or courses or modules at the bachelor, master and P.hD level. These efforts have proven to be effective and successful in developing the contents and forms of CE in higher education in order to train environmentally friendly professionals who are able to contribute to sustainable development in the future.

Keywords: Sustainable Development Goals (Sdgs), Circular Economy (CE), Higher Education Institution

INTRODUCTION

The consumption of a product and the preservation of natural resources is a dilemma that has been repeatedly highlighted in the recent literature. This problem still has the opportunity to be used as material for study in research. Some opinions state that welfare or consumption must be maintained, while others suggest that the environmental assets provided must be preserved. Solow (1993:166) suggested that we conserve the general capacity to generate economic well-being. This is important for making the transition from a linear economy to a circular economy (CE). In this CE system the use of resources is minimized by extending the life of a product by recycling, reusing or maintaining the product (Sauvé et al., 2016:54).

Circular Economy (CE) emerges as a concept that can support Sustainable Development (SD) at various levels such as industry or manufacturing, business, consumption, social, education and other fields that are in line with other sustainability strategies. CE is a breath of fresh air that brings better hope among other economic concepts. Economically, CE is more focused on efficient use of products that are more planned and durable. In this case, a better and more sustainable processing system is built to avoid wasting resources, which automatically lowers production costs and also increases economic profit. For the environment, the application of CE to wasted waste is reused and of value with a recycling system.

The increasing attention to the concept of CE is partly due to its capacity to provide a basis or foundation and reconcile issues of how to increase productivity while considering the externalities of production processes, product consumption and end-of-life impacts. At a conceptual level, there are two important questions when studying sustainable development. The first question is about what we are defending, and the second is still closely related to the first question, which refers to the feasibility of sustainable development. This is intended so that there is an allocation of resources that we will inherit to the next generation in the context of sustainable development.

There have been various criticisms of ESD and CE, particularly for their anthropocentric approach (Michael, 2013:250; Kopnina & Meijers, 2014:191). The proclamation of the "2030 Agenda" which was welcomed by 193 UN member countries made ESD unavoidable for member countries. Therefore, there must be a promotion of the transformation necessary for educational institutions from basic education to higher education to incorporate ESD (Rendon Lopez et al., 2018:136; UNESCO, 2017). In line with UNESCO, the international Committee, as in the 2030 agenda and the Sustainable Development Goals, put pressure on increasing the level of involvement of Higher Education Institutions in several areas of sustainability action (energy efficiency and renewable energy), which may be related to CE (Filho et al, 2019; 290).

Activities related to CE can be carried out in the world of education as an effort to preserve the environment, including universities. The role taken by a tertiary institution is how to socialize and educate students to understand and be able to implement CE as a form of continuing education. Currently, research on the issue of CE and the role of higher education is becoming a concern in various parts of the world. One of the driving factors is because environmental problems are currently an actual and essential topic. Environmental degradation has become one of the proofs that human activities have a direct impact on

environmental preservation. CE is receiving increasing attention in popular as well as scholarly discourse as demonstrated by the exponential growth of both practitioner and scholarly writings on the topic (D'Amato et al., 2017:718; Murray et al., 2017:369). The current enthusiasm regarding CE appears to be driven by its alleged benefits for sustainable development (Homrich et al., 2017:530; Bocken et al., 2016:309).

However, the results of these studies are still limited to concepts that have not been implemented in practice in universities. This article attempts to review both the conceptual role and the concrete actions that have been carried out by several universities abroad. This is because in Indonesia studies on CE and its relationship with higher education are still rare. It is hoped that through this narrative review, a reference can be obtained for stakeholders in higher education to implement and conduct research on CE. Therefore, the focus of the problem that will be examined in this article are:

1. How is the relation between CE and SD?
2. What is the role of higher education institutions in implementing SD?
3. What is the role of higher education institutions in implementing CE?
4. What are the supporting and inhibiting factors in CE implementation?

RESEARCH METHOD

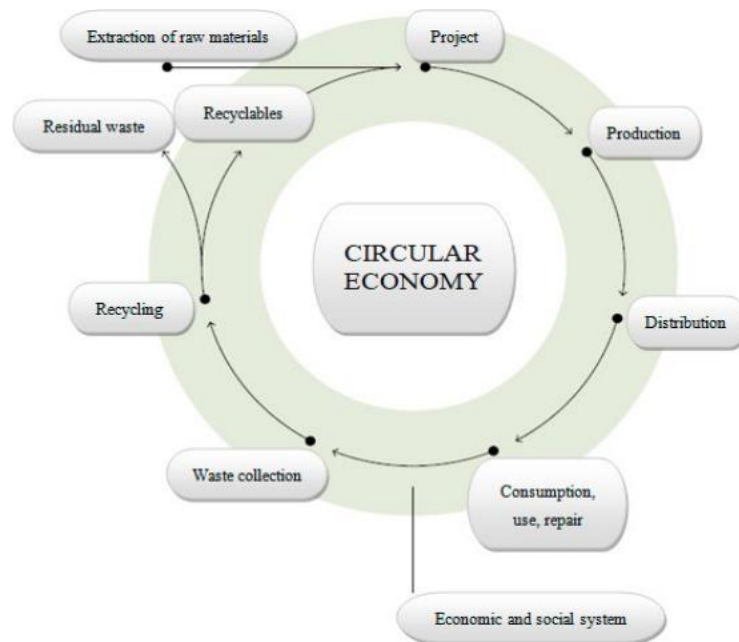
The narrative review method consists of compilation, tabulation, comparison of research results, and summarizing. The author conducted a literature review study by collecting articles from reputable international journal sites such as Emerald, Elsevier, Springer, Routledge and MDPI. After searching for research on keyword criteria, 50 articles were taken as a sample. The journal articles used are open access, full text journals with publication dates dominated by the last ten years (2010-2022) relevant to the research topic, and indexed journals. From 03 November 2021 to 03 December 2022, the authors searched for articles in reputable international journals using the keywords 'circular economy, sustainable development and higher education'. Furthermore, to find relevant articles, the authors conduct a review of relevant literature and books. This study examines the circular economy (EC), sustainable development (SD) and its relationship with universities. Studies on the implementation of CE in universities in Indonesia are still very rare. This research is expected to become a reference for higher education institutions stakeholders in Indonesia.

RESULT AND DISCUSSION

1. Circular Economy (CE) and Sustainable Development (SD) Relations

Proper use of resources and maximum reduction of their adverse impact on the environment is the main goal of CE. CE as a resource consumption does so through minimizing waste, preserving its value as long as possible, and most importantly, closing the cycle in the use of the required raw materials (Bromowicz et al, 2020:4). CE refers to a model of production and consumption that is fundamentally different from the "linear economy" model that has dominated society. Linear economy is based on simple linear processes; extract, produce, consume and dispose of waste, with little or no regard to the pollution generated at every step. However, the planet has finite limits, and even in the CE model of production and consumption, the waste generated

through the extraction and production of post-consumer goods and products comes to threaten us as pollution because it ultimately ends up either in landfills or is dispersed by other means which pollutes the environment (Sauvé et al., 2016b:53). The following is an overview of the relation between economic activity and CE (Sukiennik, et al., 2021:2)



Picture 1. Circular Economy Diagram

The link between CE and SD is that circular economy (CE) practices are relevant for the implementation of SD Goals (Schroeder et al., 2018:80). There are many conceptual interpretations of the relationship between CE and SD. This study is interesting because (Geissdoerfer et al., 2017: 757; Sauvé et al., 2016b) positions CE in relation to the more established concept of SD so that it becomes the dominant topic of discussion. Sauve et al. (2016b) has a contrasting view that in relation to environmental science and SD, CE provides a relatively clear "angle" of attack for solving environmental problems. Geissdoerfer et al., (2017:757) also found many relations between CE and SD, which revealed three general groups, they are:

- a. conditional- (CE as condition for SD)
- b. profitable- (CE favorable SD) or
- c. trade-off- (CE has both positive as well as negative sustainability impacts).

The ambiguity behind the goals embedded in the CE approach is supplied by two phenomena. First, it is the cause of all the green washing that has been associated with the keyword SD so that many proponents of the CE approach will avoid reference to SD and instead to its societal goals. Second, there is the potential to believe that if CE principles are followed, then an increase in the general welfare will emerge which can justify the promotion of circular initiatives without the need to set specific normative social goals (Sauvé et al., 2016;54).

2. The Role of Higher Education Institutions in the Implementation of Sustainable Development

Over the last decade, many higher education institutions have been involved in embedding SD and CE into the academic system. Management of higher education institutions is increasingly taking SD into account as an important element of educational strategy (Lozano et al., 2013:4; Leal Filho, et al., 2015:123; Caeiro et al., 2019:3435). Universities also promote this action so that the surrounding community can also become more sustainable (Leal Filho et al., 2019:286).

Universities play an important role in Education Sustainable Development (ESD) and SD. According to (Cicmil et al., 2017:303), responsible education for global sustainability should be facilitated through a combination of approaches: i) educational activism, ii) informal academic collaboration, iii) formal action and reporting, and iv) practical skills to maintain legitimacy and ownership of creative and innovative pedagogical models. Universities have a responsibility to produce graduates who care about the environment. On the other hand, universities are also agents for implementing CE in the educational or learning process. At the academic level, a tertiary institution can integrate circular economy themes in teaching, research and community service. Khalili et al (2015:38) conducted a study to determine how education can develop capabilities for sustainable development and cleaner production. This requires exploring the requirements and approaches in the creation of academic programs in various knowledge areas that will support national sustainable development goals. Traditionally transmissive, and most attuned to what can be a means of a directional approach is the most radical departure from practical forms of teaching to teach sustainability (Golding et al., 2007:28).

Barth (2013:165-166) highlights how changes in students come from formal and informal learning, sustainability in campus operations, and green university branding are key factors for instilling sustainability in education. There are two complementary approaches which both aim at institutionalization: first, informal learning in various activities is actively considered as an important experience. Different methods are chosen to integrate the learning in the existing seminar projects in the curriculum to enable action-oriented learning as "deductive tinkering" with different approaches and strategies. Students recognize the importance of such integration as it offers many opportunities for independent learning. Meanwhile at the same time support and moderation by lecturers are available and these efforts are accredited in the curriculum (win-win-situation). Second, additional lecture series. Often interdisciplinary and open-ended or the entire academic community offers additional input and assistance to reach a wider audience.

Universities exert a dual effect to disseminate sustainable development goals through their moral responsibility and to integrate these goals into their curricula (Caeiro et al., 2020:544; Hansen and Lehmann, 2006:830). In line with that, Lazzarini et al., (2018:239) stated that academics in principle have an important role to play in planning the integration of SDGs in tertiary institutions, and tend to work on combining these activities such as teaching, outreach, research and knowledge exchange within tertiary institutions and beyond. Research (Filho et al., 2018:290) on several universities from 17 countries divided into 5 continents, namely Europe, Africa, Asia, America (South and North) and Oceania showed that only 43% of the total 140 universities studied were have made a strategic

decision to embed the SDGs in their tertiary curriculum.

The ways that a tertiary institution can choose in implementing SD based on findings Lozano et al., (2015:7) in education which amounted to more than 70% are: possibility to take classes in other faculties; integration of elementary courses in several programs, schools and faculties; and the existence of optional SD courses. These efforts were continued by: inviting guest lecturers from primary schools; promoting systems thinking in teaching activities; holding an SD major at Masters level to promote holistic thinking in teaching activities. Research (Filho et al., 2018:291) towards several universities from 17 countries divided into 5 continents which are Europe, Africa, Asia, America (South and North) and Oceania shows that the integration of SDGs in the learning process is carried out in the following ways: (1) curriculum (formal way) , (2) informal lectures, (3) research activities, (4) extension activities, (5) conference lectures, (6) courses and capacity building, (7) live laboratories, (8) isolated actions to stimulate behavior change, (9) application in master and doctoral programs, (10) no answers or respondents who are still planning SDGs in their teaching.

Picture 2 is a model that can be developed by academics through research to get a comprehensive picture of the extent to which co-creation functions for sustainability have emerged and developed throughout the academic world, in addition to pursuing a broad understanding of the general characteristics and various driving mechanisms (Trencher et al., 2014:4)



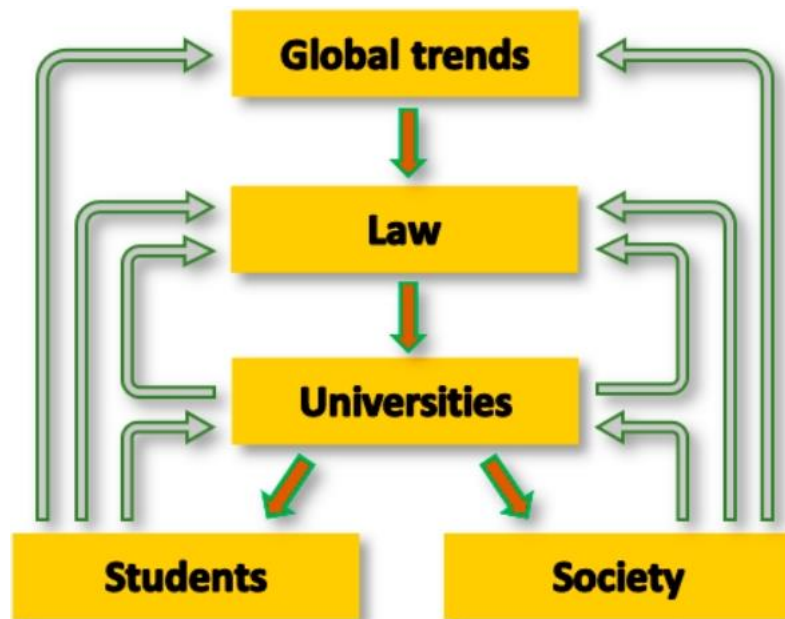
Picture 2. The application of CE through Research and Social Engagement

3. The Role of Higher Education Institutions in the Implementation of Circular Economy

Education, particularly higher education is a strategic agent that must support sustainability and CE principles in its context through teaching and research activities (Mendoza et al., 2019:556). This opinion is in line with (Pastor et al., 2013: 542) which

reveals that tertiary institutions have an existence as an education center, where this position is very strategic for building knowledge, researching and disseminating research results regarding the impact on the environment due to production activities to achieve profits, as well as improving the quality of production factors both physical and human capital. In addition, higher education also promotes actions related to the economic impact of higher education.

Universities are the most common promoters of new ideas from CE, and the reputation that universities have allows them to more easily reach students and the general public (Sukiennik., et al, 2021:8). The strategic position of a tertiary institution is illustrated in Picture 3 below:



Picture 3. Elemen Development Propagation and Circular Economy Principles (Sukiennik., et al, 2021:8)

Universities can become the key local, regional or national partners for research and development of practical solutions that enhance Circular Economy. The way this is done is to leverage funding to manufacture new products, develop business models to suit reverse operations, and influence user behavior. In addition, it could also contribute to increasing the use and retention of biological nutrients to support the agricultural and forestry sectors, and could advance technology to support the transition. Such changes in the management of waste streams on campuses and college buildings require planning, and users must be fully informed about waste disposal procedures (Nunes et al., 2018:10).

In addition, Nunes et al., (2018:11) mentions that universities can also use the Circular Economy concept as a focus for teaching and research. However, developing a hidden curriculum plan will further enhance the sustainability of the strategy and learning in practice by encouraging sustainable consumption and behavior. Promoting new circular economy ventures on campus can improve student skills. The effort

portrays sustainable trade as a realistic business opportunity.

The explanation of the research results above does not provide concrete examples of the role of higher education in CE education. This is different from what has been done by several universities in Italy which have taken concrete actions in the form of teaching students through CE programs, courses and modules. Table 1.1 below is the detailed data:

Table 1. The Number of CE Programs, Courses and Modul Offered by Higher Education Institutions in Italy.

Course	Number
Bachelor program	0
Master program	3
Postgraduate course	4
Highly specialized course	1
Seasonal School	1
Total	9
Module	Numb er
Bachelor program	8
Master program	48
Total	56

Source :Giannoccaro et al., (2021:7)

Based on Table 1 it can be seen that there is no special bachelor's degree in CE; Alternatively, these offerings are focused on master's degrees and postgraduate programs. A total of 56 different CE disciplines are offered of which eight are included in the bachelor's degree and 48 in the master's degree. The college offers at least one CE course or one CE module. It can be noted that 30 out of 49 colleges offer at least one CE course or one CE module; specifically, ten institutions offer at least one CE program or course, and 26 institutions offer at least one CE module. While the courses offered by higher education institutions in Italy are shown in Table 2 below:

Table 2. CE Programs and Courses CE Offered by Higher Education Institutions in Italy

	Course	Higher Education Institution
Master program	Sustainability and Circular Economy Management	Marche Polytechnic University
	Circular Economy	Tuscia University
	Sustainable Chemistry and Technology for CE	University of Padua
Postgraduate course	Circular Economy	Polytechnic University of Bari
	Environmental sustainability & circular economy	Polytechnic University of Milan
	Environmental management and control: circular economy and efficient resource management“	Sant’Anna School of Advanced Studies
	Bioeconomy in the CE	University of Bologna; University of Naples Federico II; University of Turin; University of Milan Bicocca
	CE for business	Sant’Anna School of Advanced Studies
Highly Specialized Course	CE for business	Sant’Anna School of Advanced Studies
Seasonal School	Circular Economy and Sustainability Management	Sant’Anna School of Advanced Studies

Source :Giannoccaro et al.,(2021:8)

Through academic programmes, courses and modules at various levels of Italian tertiary institutions and through a detailed classification of learning outcomes it is possible to provide clear evidence of the knowledge, skills and competencies offered by CE education. A college produces graduates who have the knowledge and skills that they are key to driving the CE approach to become more tangible and have the potential to raise standards of sustainable performance. This is in line with the emphasis placed on learning content that integrates sustainable issues. UNESCO (2021) also reveals that continuing education is carried out in a way of development that empowers students with knowledge, skills, values to make decisions and make responsible actions for environmental integrity, economic survival and society.

The next is the effort made by Finland. A study conducted by Sysoiev (2021:66) on training specialists in the circular economy has shown that universities offer a wide variety of CE programs at all levels of higher education. In a relatively short time, Finland has succeeded in developing the content and form of CE in higher education in order to train green professionals capable of contributing to sustainable development in the future. The CE programs provided by Finland are at various levels from bachelor, master and doctoral as shown in Table 3, Table 4 and Table 5.

Table 3 Bachelor's Programmes in Circular Economy

Programme/HEIs	Scientific Degree	Length	Credits	Education format
Sustainable Solutions Engineering	Bachelor of Engineering	4 years	240 ECTS	Online
Smart and Sustainable Design	Bachelor of Culture and Arts in Smart and Sustainable Design	4 years	240 ECTS	Traditional / full-time
Sustainable Urban Development	Bachelor in Social Sciences	3 years	180 ECTS	Traditional / full-time
Environmental Engineering	Bachelor of Engineering	4 years	240 ECTS	Traditional / full-time
Smart Organic Farming	Bachelor of Smart Organic Farming	4 years	240 ECTS	Traditional / full-time
Sustainability Studies	Bachelor in Nature and the Environment	4 years	240 ECTS	Traditional / full-time

Source: Sysoiev (2021:63)

Following are some examples of educational programs for circular economy graduates in Finland, including The Degree Program in Sustainable Engineering Solutions at LAB University of Applied Sciences and Bachelor of Culture and Arts in Smart and Sustainable Design at Häme University of Applied Sciences (HAMK).

Table 4 Master's Programmes in Circular Economy

Programme	Scientific Degree	Length	Credits	Education format
Circular Economy	Master of Science in Technology	2 years	120 ECTS	Online
Life Cycle Assessment	Master of Natural Resources	1 year	60 ECTS	Online
Environmental Policy and Law	Master in Environmental Policy & Law	2 years	120 ECTS	Online
The Environmental Change and Global Sustainability	Master in Science/Social Sciences	2 years	120 ECTS	Online

Source: Sysoiev (2021:64)

Masters training in environmental economics and politics is provided by 5 universities. These HSEs include Helsinki College (Master of Urban Studies and Planning, Environmental Change and Global Sustainability program), UEF School of Law (Master of Environmental Policy and Law program), LUT College (Master of Circular Economics program) and Tampere University of Applied Science (Master's Program in Risk Management and Circular Economy). The college offers a program to teach students how to use limited natural resources and allocate them for economic benefits in a sustainable manner that does not damage the environment; learn to consider environmental policies in decision-making, assess the costs and benefits of measures establishing water quality, clean air, waste management, and climate change.

Table 5 Doctoral Programmes in Circular Economy

Programme	Scientific Degree	Credits	Education format
Sustainable use of renewable natural resources	PhD	40 ECTS	Online
Bio and Circular Economy	PhD	40 ECTS	Online

Sumber: Sysoiev (2021:65)

PhD training is also provided in the circular economy in Finland (Table 5). An example of such a program is the Doctoral Program in Bio and Circular Economics at the University of Applied Sciences at Tampere which involves research in environmental technology, synthetic and bioenergy biology, and bioprocesses with the ultimate goal of promoting a cleaner and safer future for the benefit of people and the environment. The doctoral dissertation focuses on the analysis of various wastewater treatment technologies. In the project, the candidate will develop a method for selecting microplastics sampled from treated sewage sludge.

The implementation of CE programs in tertiary institutions requires cooperation with other parties. Research (Trencher et al., 2014:152) stated that CE and Higher Education Institutions Sustainable Co-creation is defined as "a role in which universities work together with various social actors to create societal transformation with the aim of realizing sustainable development in certain locations, regions or sub-sectors of society". The direct impact of tertiary institutions' contribution is that they can make local areas more dynamic and diverse by increasing employment and creating income and expenditure flows. Indirectly it also has an impact on the local area which generally increases human resources and attracts businesses in the education sector (Bleaney et al., 1992:302, Pastor et al., 2013:542-543).

In Poland, based on research by Sukiennik et al (2021: 11), there are different strategies for teaching CE to students through the Limbra Project. From 2019 to 2022, within the framework of the EIT KAVA 5 RIS Raw Materials competition, an international project in a consortium is being implemented in Poland, in Kraków, at AGH-UST: College of Miskolc (leader), AGH-UST, College of Engineering of Kosice, Tecnia Ventures, SL, Sociedad Unipersonal, Fundación Tecnia Research & Innovation, VŠB—Ostrava Technical College. The main objective of this project is to strengthen entrepreneurship in V4 countries in line with the recommendations of the "Green Action Plan for SMEs" by meeting the requirements of the circular economy. The results of research by Sukiennik et al (2021: 16) show that the role of higher education institutions is able to shape student awareness, which then becomes members of society both locally and globally. A new vision of the world based on a circular economy has the opportunity to emerge permanently in human life. The first training in this area conducted at AGH-UST in Poland shows that there is a marked increase in awareness among students. This provides an optimistic outlook on the future of the world economy that is in line with the ideas of sustainable development and circular economy.

4. The Supporting and Inhibiting Factors of Circular Economy Implementation

In the implementation of CE in universities in various countries, there are supporting factors and inhibiting factors. The supporting factor in a university is knowledge about circular activities that already exist in developing countries, for example, informal waste sorting (Preston et al 2017:44; Pincelli et al 2019:299). Economical innovation solutions make it possible to achieve circular and inclusive products for energy use (Busch et al, 2018:250); Human resources are essential to handle the CE transition (Chiappetta et al, 2020:5).

The findings of research conducted by Ana et al (2021:33) reveal that the transition to CE has challenges at all systemic levels. Therefore, higher education is well placed to collaborate with industry practitioners, consumers and government to address this challenge. Some authors share a skeptical view of the effectiveness of CE to achieve sustainable development due to the significant challenges associated with recycling and recovery activities related to thermodynamic and ecological constraints (entropy generation in materials) and the energy wastage that occurs in each process (Kalmykova et al., 2018:195; Korhonen et al., 2018:545).

The challenges or obstacles in CE implementation are (1) Efforts to raise awareness about the circular economy, (2) Effective application of value engineering, (3) Allocation of responsibilities and budgets, (4) Mixed team of senior managers and operational staff, (5) stakeholder collaboration and engagement (Mendoza et al., 2019b:841-842). The barriers to circular economy are financial, structural, operational, technological and attitudinal, namely perceptions of sustainability and risk aversion (Ritzén & Sandström, 2017:7). In addition, the citizens do not hold themselves responsible for the transition and think that it is a matter of government and business (Kirchher et al., 2018;)

This is different from universities in developing countries which face some unique challenges and require some unique elements, especially those that are research-oriented (compared to developed countries): creation and retention of scientific communities, relevance of research to society and industrial development and critique, cultural and social, forming a new generation of scholars and technicians (Altbach, et al., 2009:17). In addition, the practical efforts of higher education institutions do not occur in isolation but require the involvement of other actors and stakeholders so that they benefit from formal participation and informal networks. Besides that, there must be absorptive capacity in the region to incorporate new knowledge into society.

CONCLUSION AND RECOMMENDATION

Conclusion

1. Universities have a strategic role in implementing SD and CE through Tri Dharma activities, namely teaching, research and community service. Universities carry out a dual role, namely socializing sustainable development goals through their moral responsibility and integrating these goals into the curriculum.
2. There are supporting and inhibiting factors in implementing CE in tertiary

institutions. The supporting factors are in the form of knowledge about circular activities that already exist in developing countries, for example informal waste sorting, economical innovation solutions make it possible to achieve circular products and are inclusive of energy use, the presence of human resources is very important to handle. In addition to economic, policy, institutional, and technological barriers, overcoming social barriers is critical to implementing CE in a developing country context.

3. Universities in Italy, Finland and Poland have taken concrete action by providing CE programs or courses or modules at the level of bachelor, master and P.hD programs. This action proved to be effective and succeeded in developing the content and form of CE in higher education in order to train eco-friendly professionals who are able to contribute to sustainable development in the future.

Recommendation

Based on these conclusions, recommendations that can be given are:

- 1) There are needs to be a training model, innovative implementation of CE in tertiary institutions with a holistic approach related to the Tri Dharma of Higher Education and there needs to be follow-up through research on green consumption behavior from the academic community in tertiary institutions
- 2) However, only a few studies have focused on the "hidden curriculum" and the role that universities can play as part of the local economy. Therefore, it can be followed up through research.

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THE MAMUT'S MONOLOGUE: REVITALISING THE LOCAL COMMUNITY IN RANAU

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Abstract

Mamut Mine stand as a prominent copper mine in Malaysia during its heyday. The mine contributed to the spillover effects of local economy of the district of Ranau, Sabah. Mamut Mine brought the relationships consortium between Malaysia and Japan in transforming the area into prominent copper mine in Malaysia. The mine prospered into uphold the small village of Mamut by providing employment, skills and training, public amenities and brand towards putting the place in a world map of copper mining! However, the beauty of enjoyable Mamut Mine turned into catastrophic as the company - Mamut Copper Mining (MCM) Ltd, and later Mega First Corporation (MFC) ceased their operation. The mine polluting the waterways with large amounts of acid-producing minerals waste, leaving the locals in the affected area vulnerable to contaminated water usage. Further mitigation needed to be implemented not only in terms of treating the polluted waters but to twist the threats and drawbacks of the place into an opportunity. The area is set for future new tourism products particularly geo-tourism, a copper mine museum and new routes towards the summit of Mount Kinabalu, new research and educational centre for special the endemic species. This paper will briefly discuss the preliminary findings from Mamut Scientific Expedition 2022. The co-creation of tourism package is needed with involvements from all fields of disciplines: politics, economics, socials, technology, nature and laws in order to revitalise the local community in Ranau, especially in Mamut area. Working together as one voice among stakeholders to orchestrate the program for uplifting Mamut will ensure the sustainability of the nature in association with human relationships. This enduring program will lead into decent work and boosting the economic growth in related area without fully depending on government subsidies and aids.

Keywords: Tourism, co-creation, pollution, Mamut Scientific Expedition 2022, Mamut

Background of Study

The beautiful Mamut Mine portrays hidden gesture as the mine factually hazardous to everyone. The enchanting mine was breathtakingly formed the greenish emerald-coloured water with stylish mysterious geographical landscape of storybook's monologue (Illustration 1). Mamut Mine or famously known as Mamut Copper Mine (MCM) is an abandoned open pit quarry mine in Ranau, Sabah, Malaysia (Illustration 2). MCM began its operation back in 1975 with copper extraction as a primarily business as well as other precious metals namely gold and molybdenum (Mansur et al., 2016; Saibeh et al., 2016). The mine also connected with several waterways or river systems namely the Bambang River which flows south, the Lohan River which flows southeast to east and the Mamut River which flows east that supply waters for agricultural activity and domestic use (Akiyama, 1984). According to Hoyle (1980), the MCM contributes towards local economy with spillover effects in surrounding Mamut area as well as the Ranau district in terms of employment, public accommodation (roads, bridges, waters and electricity), training and skills.

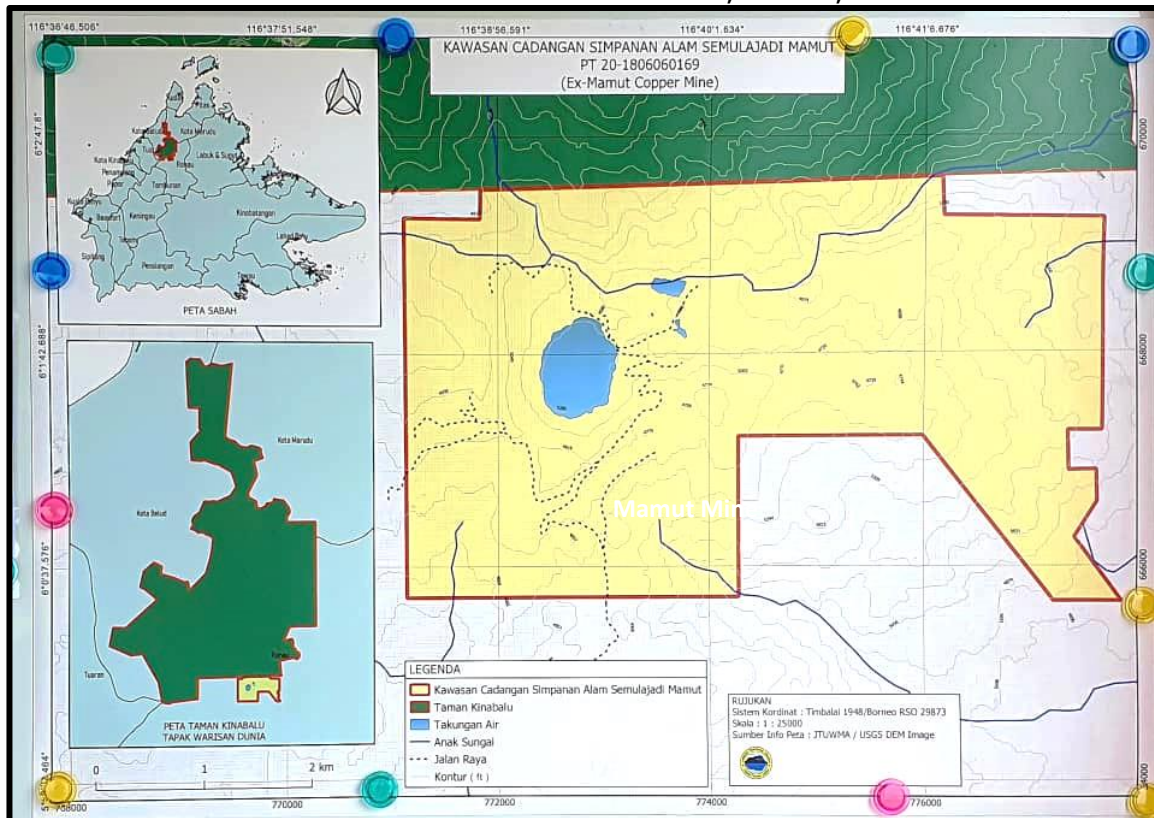
MCM was ceased in 1999 after 24 years of operation, leaving an extensive environmental problem especially the dust pollution, soil erosion and waterways pollution (river) (Saibeh et al., 2016). Bhattacharjee (2015) stated that, the pollution registered RM200 million in toxic legacy. The pollution caused by heavy metal concentration discharging from the mine pit that pollute the waterways in Mamut area (Isidore et al., 2012). The waterways pollution affects the freshwater supply for agricultural activities such as paddy fields and orchards as well as for daily consumption. There was a mitigation for the issues in responding towards the concerns of local population surrounding the areas. However, the pollution still remains haunting the locals as many rivers are polluted including the mine itself and the land cannot be cultivated (Bhattacharjee, 2015). In addition, the treatments and rehabilitation for the area, especially involving neutralisation of the acidic mine pit discharge is costly (Mu, 2022; van der Ent & Edraki, 2016). Today, Mamut become the centre of attraction among local and international scientists, looking for solution towards heavy polluted water and rivers.

Illustration 1: The Present Day of the Abandoned Mamut Mine (Open-pit Quarry) in Ranau



Source: Mamut Scientific Expedition 2022

Illustration 2: The Location of Mamut Mine in Mamut, Ranau, Sabah



Source: Mamut Scientific Expedition 2022

Problem Statements

MCM considered as one of the most polluted mines in Malaysia as the mine causes numerous environmental problems and contamination (Ali et al., 2015; Ali et al., 2004; Mu, 2022; van der Ent & Edraki, 2016). The area was connected by several rivers that irrigates along the way of Ranau district. According to Ali et al. (2004), the mine streams throughout segment of the Kinabalu Park at the lowland tropical rainforest of Poring, Ranau under the gazetted area for conservation, recreational and tourism. Although the river alongside the mine is highly polluted, however, it creates another avenue of opportunities for recreational and tourism activities especially the edutourism industry (Ali et al., 2004). The activities will further uphold the livelihood of Mamut's community particularly those reside the nearby river and mine. A further recommended analysis and investigation of MMC area (water and soil) are needed to ensure safeness before any implementation of the commercial projects take place.

The drawbacks of this place highlight the attention to comprehensively understand the livelihood of the households and villagers residing nearby Mamut mine in term of their economic living. A very few knowledge and information related to the people living in Mamut area, therefore urge for a new study to determine the information related that valuable for future development and social well-being of the villagers in Mamut living amidst the polluted waterways, especially the rivers. The study also rigorously looks into the future edutourism and science park centre that probably creates positive impact of the villagers in Mamut in terms of business activities, employment and contribution to future gross domestic products (GDP).

The concept of co-creation will create the engagement and involvement of stakeholders with the villagers' surrounding area of Mamut to digest the ideas of working together towards the possibility of edutourism, including the science park implementation in Mamut. This concept will harmonise the involvement through DART Model of Dialogue, Access, Risks and Transparency.

Research Objectives

1. To determine the social impact of community livelihood in Mamut, Ranau.
2. To determine the relationship of co-creation of edutourism and community sustainability in Mamut, Ranau.

Methodology



Mamut Scientific Expedition 2022

The research undertakes the quantitative approach using questionnaires (Malay Language) and targeted to the community as well as villages surrounding Mamut mine. These are the Head of the Village, *Wakil Ketua Anak Negeri (WKAN)*, *Pengerusi Jawatankuasa Pembangunan dan Keselamatan Kampung (PJPKK)* and the villager in Kampung Poring and Bongkud, Ranau. The stakeholders (Government agencies, tour agencies and retailers) were designed for future visit. The sampling will employ purposive sampling as the respondent exclusively resides in Mamut mine and the surrounding area. In addition, the research also to determine the data regarding their economic livelihood and to analyse the co-creation concept. The data will be analysed using the Statistical Package for the Social Sciences (SPSS), Binary Logistics and Partial Least Square-Structural Equation Modelling (PLS-SEM). The research was conducted during the four days visits to Mamut, Ranau, Sabah under Mamut Scientific Expedition 2022.

Preliminary Findings

The Potential Tourism Outlook of Mamut Mine

The area provides potential for park's conservation system (Dol, 2022). The new tourism products namely geo-tourism, a copper mine museum and new routes towards the summit of Mount Kinabalu via the eastern ridge (Mu, 2022). In addition, MCM also has the potential for a new research and education centre particularly for sustaining the livelihood of endemic species (Mu, 2022). Therefore, this will create an avenue for Sabah to enrich the collaboration with experts from local and foreign research institutions (Mu, 2022). Based from Mamut Scientific Expedition 2022, the respondents agreed that MCM has the future potential for research and educational centre focusing on geo-tourism in Malaysia. Indeed, the geo-tourism park or educational centre is on-point for revitalising the economic factors in Mamut area post pandemic. Visitors, researchers, scientists and scholars from all around the nation will flock into this place and creates the new tourism package for Ranau and probably boost the economic growth for affected area.

Co-creation of Training, Skills and Courses

Respondents also agreed that, working together with stakeholders from all area of disciplines to create value for Mamut, particularly the surrounding area of the mine. The implementation of courses, training programs and skills enhancement are needed to groom the future and potential local youths to venture themselves in business and work related to geo-tourism business. The respondents also look into special courses of marketing and entrepreneurship in helping them reshape their ability to create business and brands for Mamut in terms of products, services and merchandise. The locals also urged the local tour and government agencies, NGO's, politicians and business retailers to actively involved and co-create in orchestrating the program in order to make it all rounded for flexibility and enduring.

River is Their Life for Sustainability

Indeed, river plays crucial roles in sustaining livelihood of human civilisation. The Dusun Bundu Liwan ethnics in both Kampung Poring and Bongkud stated that, rivers or streams are important to their livelihood since long time ago. Although few of the rivers in Ranau was polluted by Mamut Mine, some are regarded as safe for daily consumption. In addition, they also perform *Tagal* (prohibited from fishing and catching the fish) as part of ritual to sustain the sources of foods – freshwater fish. This is another opportunity for the locals to commercialise *Tagal* as part of tourism activities in attracting visitors and tourists to their place.

The Gravity Fed Water Systems as Source of Life!

The gravity fed water systems is regarded as the main sources of life for those who reside in place (Ranau, particularly Mamut) with difficulties in getting the water metering due to location especially in Kampung Poring and Bongkud. The residents there are occupy with gravity fed water systems in hope to minimise their expenses

because majority of them are still living below the poverty line especially in Kampung Bongkud, Ranau. In fact, they can use their gravity fed water systems for breeding the freshwater fishes by having a pond nearby their house. Moreover, they can cultivate their vegetables (hydroponic) from using the gravity water as source for watering their crops. They can sell it in the market and thus, sustaining their livelihood into a better position. This another way to pave their life into more decent way in getting revenues and income and eventually revitalise their life.

Conclusion

MCM left the greatest legacy in Sabah's history as one of the most mind-boggling abandoned open-pit quarry mine in Malaysia. The heavy polluted mine that flows into the main rivers in Ranau, Sabah brought disaster into water management. Although the mitigations were implemented previously, the deep visibility scars still occur until today. However, the problems can be twisted away into positivism looking into better future for the people resides in the affected places. The mine itself has the potential for both geo-tourism park or educational centre respectively. The place signalling the hidden gem that yet to be explored by our fellows Sabahan. MCM will become another tourist's spot and attraction through the establishment of the geo-tourism park or educational centre in Sabah during the post pandemic. Training, courses and skills related workshops is needed for the local youths and aspiring entrepreneurs to venture themselves into world of business. They are the future leader to manage and sail the ships of their place into renown place with the best branding that representing their cultures. The concept of co-creation also opens up an opportunity to create the involvement and engagement from all disciplines to joint together for the best establishment of tourism centre in Mamut that embedded all voices and ideas of the stakeholders. The co-creation strategy plays as happy medium to ensure the inclusivity in revitalising the local community in Ranau in decent work and promoting the integrated of economic growth among their daily life.

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DARK TOURISM: A NEW CHAPTER OF TOURISM INDUSTRY IN SABAH

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Abstract

No doubt that COVID-19 pandemic changed the human civilisation around the globe, leaving the unprecedented disruption over daily routines and activities. Business activities faces the great deals of challenges over their sustainability and survivability throughout the pandemic. Travelling restrictions, movement control order and social distancing were parts of the new normal experienced by everyone during COVID-19. Tourism industry was badly affected due to this pandemic and majority suffered to their last cent! The pandemic open for a new avenue of a new chapter of tourism industry in Malaysia, specifically in the Land Below the Wind. The dark tourism dubbed as the longest element of tourism and prominent in the Western countries. In Malaysia, such activity is considered as a niche market and untapped. The dark tourism is another example of blue ocean strategy that need to be explored for the variation of activity in Malaysian tourism industry. The dark tourism is another manifesto for Sabah to showcase and communicate its rich cultural values using social media as mediator for strengthening the message and information to netizens. This paper will briefly conceptualise the meaning of dark tourism with the anticipation of social media as a new chapter of tourism industry in Sabah amidst post-pandemic. The industry has brighter opportunity in revitalising the economic growth of tourism industry in Sabah with new fresh idea and regain the industry 'mojo' back in action!

Keywords: Dark tourism, sustainability, survivability, social media, Sabah

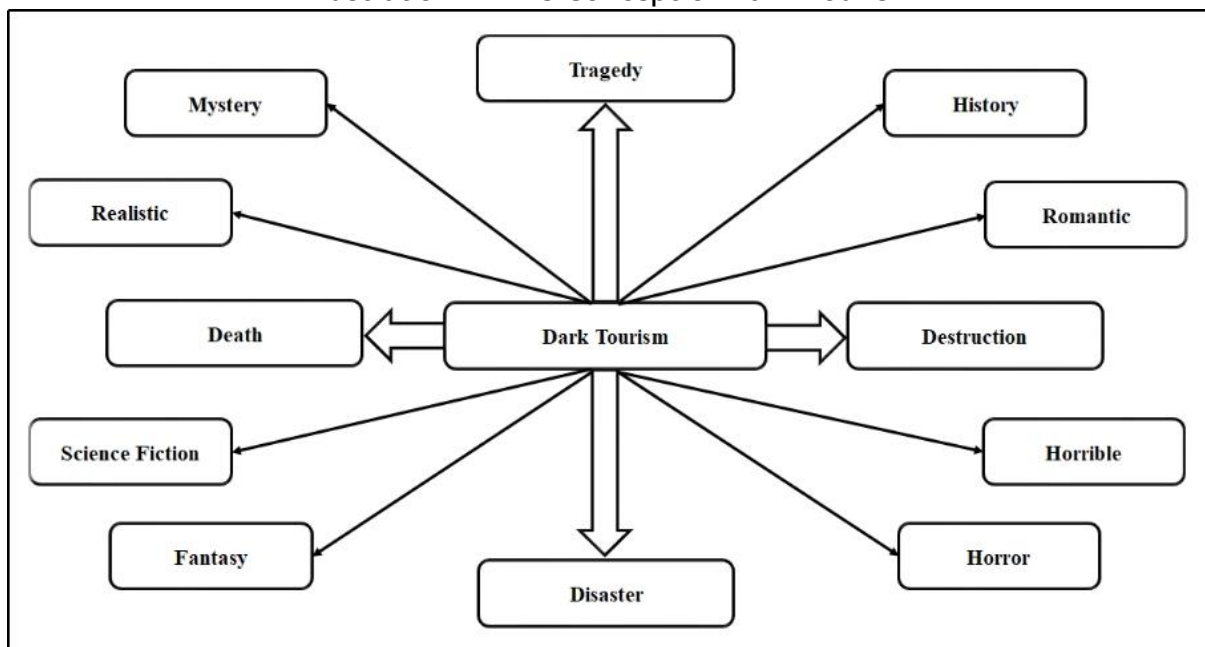
Introduction

The beauty of the dark tourism activities lies in the concept coined by Lennon and Foley with elements of tragedy, destruction, death and disaster. The concept is very much signifying the storybooks with representations of mystery, history, romantic, horrible, horror, fantasy, science fiction and realistic features of the scene. No doubt, dark tourism was a passively outgoing presentation of the scenes, sometimes creates the negative connotation and bad energy among the patrons. Indeed, the dark tourism considered as an infant product in Malaysia although the industry exists in the market

since long time ago (Zahari et al., 2016; Tan & Lim, 2018). In addition, the dark tourism is considered as a niche market (Zahari et al., 2016) and probably bring another fresh new avenue in Malaysian tourism industry post pandemic. Moreover, in the Twelfth Malaysia Plan, it was anticipated that in 2025, around RM73 billion receipts will be generated by the arrivals of 24.3 million foreign tourists and RM100 billion in revenue will be generated by 212 million domestic visitors for the tourism industry.

The lack of information regarding dark tourism studies in South East Asia (Bhati et. al., 2019) results in insufficient existing literature (Tan & Lim, 2018). Malaysia has a lot of dark tourism sites, but they are not internationally recognized. (Jamin et. al., 2020, Mohd. Zahari et al, 2016). The lack of awareness and knowledge in dark tourism makes it difficult to expand dark tourism industry in Malaysia. For example, Penang has sites that can be developed into dark tourism sites, but it has not been specifically marketed as a dark tourism destination. As many nations around the world struggles to revitalise and regain their tourism industry, Malaysia should take this opportunity to diversify its tourism package for sustainability and to cope with stiff competitions in the market. In addition, the dark tourism industry will become the new brand of tourism products in attracting the domestic and international visitors. In line with the emerging of world of digitalisation, social media plays crucial role as a platform in promoting and boosting the dark tourism industry in Malaysia as a medium to generate economic growth among Malaysian post pandemic. This paper will briefly discuss the dark tourism concepts and its contribution towards Malaysian economy.

Illustration 1: The Concept of Dark Tourism

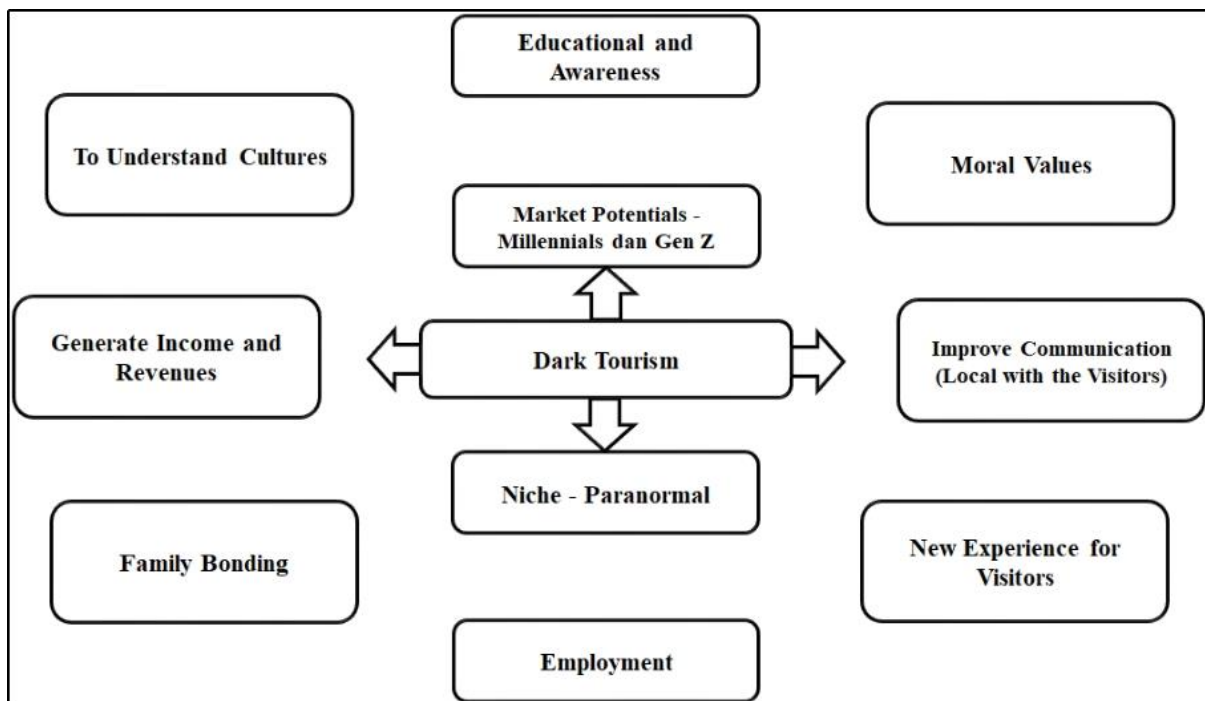


Source: Modified from Lennon and Foley, 2000

Illustration 2 shows the advantages of dark tourism as a booster toward economic growth. Jamin et al (2020) orchestrated that, the dark tourism plays an important role in uplift the economic factors of local people, especially in Sabah. The dark tourism

industry contributes in terms of employment to the locals with through the establishment of the centre or the place itself in the suggested area of dark tourism. Moreover, the dark tourism industry also enhances the communication, especially the English language among the locals with their involvement as tour guide and spokesperson – one with expertise and skills related to the location. As the tourism considered as an infant product in the market, the industry has the voluminous opportunities to showcase and introduce the local culture, moral values, the paranormal activity and educational purposes to local and foreign visitors particularly to millennials. The industry also creates a fresh new experience to visitors as they learn through the history of the place. The industry also contributes an income and revenues to the locals and help to improve their living standards. In a nutshell, the industry will generate an economic growth especially in the rural places where amounts of dark tourism sites were identified but yet to be promoted (Sabah Parks, 2022).

Illustration 2: The Advantages of Dark Tourism – Economic Growth



Jamin et al., 2020

The Dark Tourism Location in Malaysia and Sabah

Illustration 3: The Dark Tourism in Malaysia



Although the dark tourism considered as an infant product in Malaysia, there is volume of opportunities for the industry to be deemed as an added value towards existing of Malaysian tourism industry. Few of the identified places namely the War Museum in Penang, the Bidong Island tragedy, the Jerejak island in Penang and Agnes Keith House in Sandakan, Sabah. While in Sabah, there was numerous places and location dubbed as dark tourism sites (Illustration 4 and 5). These locations include the Petagas War Memorial, the Death Marches track between Ranau and Sandakan, the Kundasang War Memorial, the Double Six Memorial, Mat Salleh Memorial in Ranau, Labuan War Cemetery, the Monsopiad Cultural Village, the tragedy of Pampang River during Greg Storm in 1996 and the Japanese War aircraft remains in Sugud, Penampang. All of these places recorded the tragedy, sorrow, death, destruction and disaster for everyone to remembered and thus, connotes clearly the dark tourism concept by Lennon and Foley.

Illustration 4: The Dark Tourism in Sabah



Sandakan Memorial – The Death Marches
Sumber Foto: AGENCY, 2020



Laluan The Death Marches yang Mencabar
Sumber Foto: Sri Pelancongan Sabah Sdn Bhd, di dalam Sabah Tourism, 2021



Kundasang War Memorial yang Gagah
Sumber Foto: Tripadvisor, 2021



Taman Peringatan Petagas Pendam Duka
Sumber Foto: Tripadvisor, 2021



Tugu Peringatan Double Six, Sembulan
Sumber Foto: Koleksi Peribadi, 2021



Jambatan Tamparuli dan Plat Peringatan
Sumber Foto: Ismail, 2019

Illustration 5: The Dark Tourism in Sabah



Mat Salleh Memorial, Sembulan
Sumber Foto: Sabah Tourism, 2021



Labuan War Cemetery
Sumber Foto: Wikipedia, 2021



Kesan Enjin Jet Pejuang Jepun
Sumber Foto: Henry Bisius, 2021



Monsopiad Cultural Village
Sumber Foto: Skypod Hotel, di dalam Malaysian Travel Guide, 2017



Sungai Pampang dan Ribu Greg 1996
Sumber Foto: Sabah Post, 2019



Lokasi: Dahan Honggom
Sumber Foto: Henry Bisius, 2021

According to Tan & Lim (2018), the growth of dark tourism destinations contributes to the development of urban tourism. This is good for Sabah as they also mentioned that Sabah has more potential dark tourism sites. Moreover, they also stated this will help to promote local cultures and history, generate income, and create job opportunities for the local community and hence, will boost country's economy and creating the decent workforce. Jamin et al (2019) also stated that it generates income

for the local community especially in Sabah. The usage of social media as a medium of promotion will help to gain an awareness, interest, desire and action among or AIDA Model among netizens and probably increase their patronage into the location.

Conclusion

Indeed, the dark tourism industry is still new in Malaysia, particularly in Sabah and considered as a new chapter for Sabah's tourism industry. Stakeholders need to work together through their involvement, collaboration, engagement and relationships between one to another particularly academicians, the governments, private organisations (tour agency), local politicians, the community and public per se as to work together to come out with a comprehensive implementation of the dark tourism to everyone in the name of co-creation. As a new chapter in tourism industry, the dark tourism will provide an added value towards the industry and uphold the livelihood of the rural population in Sabah. More rigorous research and study is needed to understand more about dark the tourism as a medium to promote national heritage, boost economic growth and creates a decent workforce in coping with the post pandemic scenario to the highest achievement.

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RESEARCH OVERVIEW ON INDUSTRY ANALYSIS AND HUMAN CAPITAL ASSESSMENT IN TOURISM INDUSTRY OF SABAH, MALAYSIA AND NORTH KALIMANTAN, INDONESIA

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Abstract

As of 8 March 2022, COVID-19 cases in Malaysia have marked a total of 3.62 million, and 5.75 million cases in Indonesia. In Malaysia, the impact of Covid-19 has been particularly catastrophic for travel and tourism sector. It triggers economic recessions around the world. Local news Berita Harian reported that there is an increment of 778,800 unemployed individuals compared to April last year. While Bernama posted that the labour force growth was only about 0.6% in April this year, the lowest since September 2014. More than a month ago dated 4th of May 2020, the Ministry of Tourism, Culture, and Environment stated that it will conduct a brainstorming session to come up with ideas and effective plans for the post-Covid 19 period involving sectors that come under the ministry (Tourism Malaysia, 2020). Chan (2020) reported that Sabah's tourism is sector worst hit by Covid-19 pandemic. Research done by Institute of Development Studies (IDS) Sabah shows at least 34 per cent are on unpaid leave while another 32 percent of tourism-related jobs have had to take a pay cut. Sabah will have to diversify tourism sector following China flight ban and has to tap tourists from countries other than China in a bid to salvage its tourism industry. Sabah's tourism industry has been hit hard by the epidemic, as Chinese tourists comprise the largest number of foreign visitors last year, totalling 558,903 people. Post COVID-19 time would require small and medium enterprises in the tourism industry to reassess its current position and gauging human capital strategy to align its human capital to meet the organizational target. While in the context of Indonesia, COVID-19 has impacted the tourism industry due to the decreased number of foreign tourists visiting Indonesia since the pandemic. Some paper published in relation to Indonesia, has studied on the Indonesian Government and programmes mitigating the pandemic (Anele, 2021), patterns across Bali and Yogyakarta (Pramana, 2021), context of how governance and tourism industry will adapt to the pandemic (Guridno, 2020), and study related to Geopark in Indonesia by Cahyadi (2021). Based on the current situation, the study proposed: (1) to conduct an *industrial analysis* on small and medium enterprises in Sabah tourism industry using few Industry Analysis methods and (2) to conduct assessment on human capital in the small and medium enterprises by using Human Capital Management Practices Assessment Tools. The research will be precedent to any research that has been conducted in Sabah focusing

on industry analysis and human capital assessment post COVID-19 crisis. The research is expected to be meaningful to policy maker and industrial small players.

Keywords: Industry analysis, human capital assessment, Sabah, North Kalimantan

INTRODUCTION

1.1 Overview

The coronavirus pandemic has upended business as usual for colleges and universities. Campuses have shifted to remote learning almost overnight and it also suddenly grappling with grave financial challenges (Deloitte, 2020). Nearly every aspect of normal life has been affected by the spread of coronavirus and its associate disease. COVID-19. Business of all different sizes and industries of all different sorts have been significantly impacted. Layoffs and furloughs have soared, with unemployment reaching levels not seen since the Great Depression of United States. Oguz (2020) written that the insidious virus has cast a pall of fear, gloom, and death throughout the world, catching countries and regions without strategies to deal with pandemic, and throwing international and local health organizations and governments into makeshift strategies, responding without national or international coordination at differing rates of speed to the spread of the virus. The impact on economies and livelihoods has vaulted from severe to catastrophic.

The impact of Covid-19 has been particularly catastrophic for travel and tourism sector. It has changed the way people travel. It triggers economic recessions around the world. Thailand, Portugal, Jamaica, Spain, Turkey, and the Dominican Republic where the Travel and Tourism sector provides between 16% and 50% of the GDP from exports are more vulnerable to declines in arrivals. All these countries may not be able to recover in the short or medium term (Oguz, 2020).

The crisis affected Chinese tourists who are the biggest spenders in the world, far ahead of the Americans, with \$277.6 billion in 2018, of which \$4.4 billion was in France. Subsequently, the virus attacked the world's top tourist destination, Europe. In 2018, the continent welcomed 672 million tourists, half of the international arrivals in the world. Europe has already lost at least 2 million hotel nights since January, and airlines have suffered downturn in activity, fly empty and as a result putting in place emergency plans to deal with potential bankruptcy.

1.2 Problem Statements

As of 15th of June 2020, Malaysia has recorded 41 new cases on that Monday, taking the total number of infections in the country to 8,494 (Ministry of Health Malaysia, 2020). On the same date, local online news MalaysiaKini posted that up until April 2020, unemployment rate in Malaysia has increased to 5%, topping the average of the past 30 years.

Another local news Berita Harian reported that there is an increment of 778,800 unemployed individuals compared to April last year. While Bernama posted that the labour force growth was only about 0.6% in April this year, the lowest since September 2014. More than a month ago dated 4th of May 2020, the Ministry of Tourism, Culture, and Environment stated that it will conduct a brainstorming session to come up with ideas and effective plans for the post-Covid 19 period involving sectors that come under the ministry (Tourism Malaysia, 2020). Chan (2020) reported that Sabah's tourism is sector worst hit by Covid-19 pandemic.

Chan reported the fact based on a recent study conducted by Institute of Development Studies (IDS) Sabah. Chan in the report Malay Mail, quoted that "At least 34 per cent are on unpaid leave while another 32 percent of tourism-related jobs have had to take a pay cut." It is revealed that they have zero income due to the absence of visitors during the MCO measure. The findings were the result of a survey carried out by IDS targeting selected business sectors that are badly affected by the Covid-19 Pandemic and the MCO. Fong (2020) reported that recovery of Sabah's tourism industry will be long and arduous. In the event of related industry, Aroff (2020) reported that Airasia terminates 111 flight attendants, 172 pilots, and 50 engineers.

Based on the scenario, Sabah will have to diversify tourism sector following China flight ban (Miwil and Taiming, 2020). The news report stating that Sabah is looking at tapping tourists from countries other than China in a bid to salvage its tourism industry. Sabah's tourism industry has been hit hard by the epidemic, as Chinese tourists comprise the largest number of foreign visitors last year, totaling 558,903 people.

Post COVID-19 time would require small and medium industry to reassess its current position and gauging strategy to align its human capital to meet the organizational target.

Figure 1: Arrival of Tourists January – March 2020



Source: Sabah Tourism (2020)

1.3 Justification for Research

Based on the current situation, the study proposed to conduct an *assessment* on small and medium enterprises in Sabah tourism industry by using Industry Analysis method and human capital assessment. The justification for the need of the research is even crucial when it was reported that 26 per cent tourism players in Sabah lost jobs due to movement control orders (MCO) (Andrew, 2020). Hence it is high time that research should be conducted to assess the industry and gauging the human capital aligning to organizational needs especially post COVID-19 pandemic crisis.

There is also limited study on the tourism industry post pandemic, at Tarakan, Indonesia.

1.4 Research Questions

1. What is the current industrial position of tourism small and medium enterprises in Sabah post-COVID-19?
 - a. How does the outlook of Competitive Forces look like after the pandemic crisis?
2. What is the current industrial position of tourism small and medium enterprises in North Kalimantan post-COVID-19?
 - a. How does the outlook of Competitive Forces look like after the pandemic crisis?
3. What is the human capital strategy anticipated by the small and medium enterprises in Sabah tourism industry post-COVID-19?
4. What is the human capital strategy anticipated by the small and medium enterprises in North Kalimantan tourism industry post-COVID-19?

1.5 Research Objectives

Industry analysis is crucial because it helps a business understand market conditions. It enables the industrial players to forecast demand and supply consequently, financial returns from the business. Hence the research objective 1 is:

1. To conduct Industrial Analysis using Competitive Forces Model (Porter's Five Forces) and Broad Factors Analysis (PEST Analysis)

Research Objective 2: While human capital assessment enables strategic planning in organization, integrating organizational alignment, providing better and effective leadership, developing human capital talent and, empower and motivate a performance culture. Hence, the research objective 2 is:

2. To assess human capital in organizations using Human Capital Management Practices Assessment Tool and Self- Assessment Checklist for Agency Leaders

1.6 Definitions of Terms/Variables

Assessment can be defined as the action of assessing someone or something.

Small and medium enterprises in services is an enterprise with full time employees not exceeding 50 or annual sales turnover not exceeding RM5 million.

Services Sector/ Size	Micro	Small	Medium
Number of employee size	Less than 5 employees	Between 5 & 19 employees	Between 20 & 50 employees
Annual sales turnover	Less than RM200,000	Between RM200,000 & less than RM1 million	Between RM1 million and RM5 million

*Approved for adoption by National SME Development Council on 9 June 2005

Industry Analysis is a market assessment tool used by businesses and analysts to understand the competitive dynamics of an industry. The analysis enables to gauge a sense of what is happening in an industry like demand and supply statistics, degree of competition within the industry, state of competition of the industry with other emerging industries, future prospects of the industry taking into account technological changes, credit system within the industry, and the influence of external factors on the industry. Industry analysis, for an entrepreneur or a company, is a method that helps it to understand its position relative to other participants in the industry (CFI, 2020).

Human Capital Assessment is intended to be the starting point for aligning the organization's human capital management practices to its business strategy (Human Capital Center, 2011)

The assessment process is designed to:

- i. Identify the current state of human capital management practices
- ii. Identify the gaps between these current practices and what is needed to drive business strategy and growth, to help the organization understand the risks and the current gaps pose
- iii. Provide specific recommendations on redesign and augmentation of existing human capital management practices to support business strategy
- iv. Together with the organization's senior team, develop a roadmap of priorities for action

1.7 Significance of Research

Both analysis and assessment will be precedent research that can be an example or guide to be considered in subsequent similar circumstances for future research. The proposed research would provide an industrial insight of tourism small and medium enterprises post pandemic crisis and their way forward.

With a successful adoption of strategic HCM practices, it should be able to: 1) Increase operating efficiencies and scale; 2) Accelerate progress towards meeting financial and social objectives; and 3) Successfully implement and sustain organizational change (Grameen Foundation, 2011).

1.8 Limitations

The possible limitations of the research can be in the form of financial resources of insufficient funding or the continuous occurrence of new cases after movement control order (MCO) in Malaysia.

Restriction to travel is another limitation of the study, researchers may not be able to cross border to conduct joint research fieldwork.

1.9 Research Locations

The proposed study will be conducted by both teams from Universiti Malaysia Sabah, and Sekolah Tinggi Ilmu Ekonomi Tarakan, at Kota Kinabalu and Tarakan.

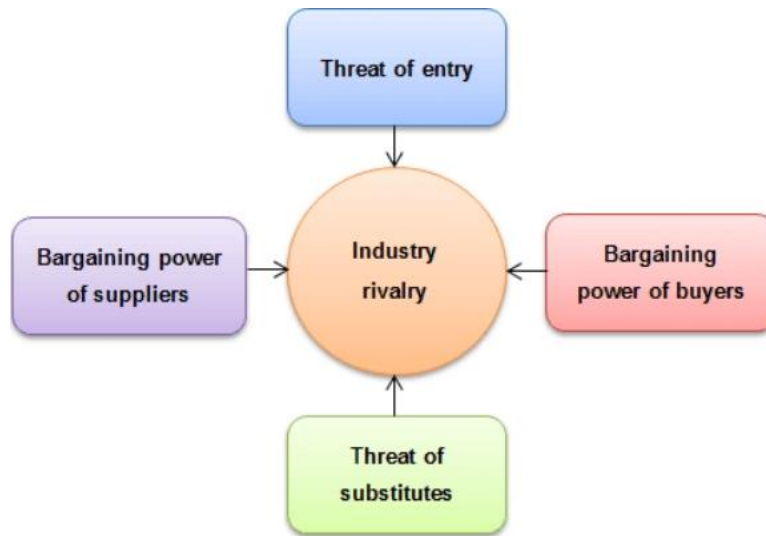
LITERATURE REVIEW

2.1 Industry Analysis – Five Forces Model

Industry Analysis is a market assessment tool used by businesses and analysts to understand the competitive dynamics of an industry. The analysis enables to gauge a sense of what is happening in an industry like demand and supply statistics, degree of competition within the industry, state of competition of the industry with other emerging industries, prospects of the industry taking into account technological changes, credit system within the industry, and the influence of external factors on the industry. Industry analysis, for an entrepreneur or a company, is a method that helps it to understand its position relative to other participants in the industry. It helps them to identify both the opportunities and threats coming their way and gives them a strong idea of the present and future scenario of the industry. The key to surviving in this ever-challenging business environment is to understand the differences between organization itself and its competitors in the industry and using it to full advantage (CFI, 2020). There are three commonly used and important methods of performing industry analysis. The three methods are: 1. Competitive Forces Model, 2. Broad Factors Analysis, and 3. SWOT Analysis. According to Porter, analysis of the five forces provides impression of industry and makes analysis easier. The five forces are threat of potential entrants, bargaining power of buyers, bargaining power of suppliers, threat of substitute goods and services, power of complementary good and

services providers. Five forces model was created by Michael Porter in 1979 to understand how five key competitive forces are affecting an industry.

Figure 1: Porter’s Five Forces Model



Source: Jurevicius, 2013

These forces determine an industry structure and the level of the competition in that industry. The stronger competitive forces in the industry are the less profitable it is. An industry with low barriers to enter, having few buyers and suppliers but many substitute products and competitors will be seen as very competitive and thus, not so attractive due to its low profitability.

Figure 2: Industry Structure and Level of Competitions



Source: Jurevicius, 2013

Jurevicius stated that threat of new entrants is high when low amount of capital is required to enter a market; existing companies can do little to retaliate; existing forms do not possess patents, trademarks or do not have established brand reputation; there is no government regulation; customer switching costs are low; low customer loyalty; products are nearly identical and economies of scale can be easily achieved.

Strong bargaining power of buyers exerts when buying in large quantities or control many access points to the final customer; only few buyers exist; switching costs to other supplier are low; they threaten to backward integrate; many substitutes; and buyers are price sensitive.

Rivalry among competitors is intense when there are too many competitors; exit barriers are high; growth of industry is low or negative; products are not differentiated and can be easily substituted; competitors are equal size; and low customer loyalty.

In using Porter's Five Forces Model, three important steps were identified by Jurevicius which are: Step 1: Gather the information on each of the five forces; Step 2: Analyze the results and display them on a diagram; and Step 3: Formulate strategies based on the conclusions.

2.2 Human Capital Management Assessment

Grameen Foundation (2011) suggested that with a successful adoption of strategic HCM practices, it should be able to:

1. Increase operating efficiencies and scale
 - a. Operating expense ratios will decline as more strategic human capital management practices are implemented
 - b. Sustainable growth is supported through appropriate workforce planning, fair and relevant recruitment and selection practices as well as leadership development focus and succession plans
 - c. Decision-making is rationalized to the lowest appropriate level; through leadership development, performance planning and strengthened communication
 - d. Client outreach is increased due to improved field officer selection, retention, development and engagement
2. Accelerate progress towards meeting financial and social objectives
 - a. Recruitment and selection practices ensure new hires are aligned with social mission
 - b. Employee turnover reduced through improved selection, learning and development, and appropriate rewards and incentives, motivation and commitment is increased through performance planning, career development, and a clear understanding, measurement of, and attention to employee engagement levers,
 - c. Appropriate incentives contribute to increased client transparency and protection

3. Successfully implement and sustain organizational change
 - a. Organizational change is embraced and sustained, whether internally generated or in reaction to outside pressures
 - b. Recruitment and selection practices able to support new product lines
 - c. Organizational learning supports acquisition of new skills required

Following is the summary of contemporary approaches to assessment of human capital components and possibilities of results use:

Author	Objective of study	Method of Analysis	Components of Assessed Objective	Possibilities of Result Use
Balcerzak, 2016	Quality of Human Capital	Multiple-criteria analysis	HC components according to formation and use stages; key ones: education, R&D, employment, productivity	Regulating human capital reproduction at macroeconomic level
Bechtel, 2007	HC value	Market value method	Market factors of price formation	Alignment of employees' and employers' interests in determining the HC value
Cadil et al. 2014	HC impact on GDP and unemployment	Cluster and regression analysis	Education as a key element of HC	Improving the educational structure of HR in different sectors / clusters of economy
Jakubowska, 2016	HC effectiveness depending on health limitation	Variance analysis	Health level factor and results: employment, income	Improving social policy, in particular in the field of employment of disabled people and people with health conditions (limitations)

Jeremic et al. 2012	HC (composite index)	Multivariate I-distance method / cluster and correlation analysis	HC indicators by groups: education, skills, science and technology	Detection of HC reserves by rank comparisons with other countries
Hayton, 2003	Interaction between HC management and strategies of HRM	Correlation analysis, sociology review	Strategic and financial HC management practices	HC management use for sustained competitive advantage
Marvel and Lumpkin 2007	HC impact on innovation outcomes	Correlation analysis, sociology review	General (education and experience) and specific HC factors (prior knowledge by types)	Managing knowledge that can influence innovation outcomes for technology entrepreneurs
Zakharova and Kratt, 2014	Risk of human capital investment	Multi-criteria ranking	HC investments in the following areas: education, professional development, health care, mobility, motivation; Results: productivity, return on investment	Assessing the feasibility of human capital investment at microeconomic level
Unger et al. 2011	HC impact on entrepreneurial success: size, growth, profitability	Meta-analysis based on correlation	General (education and experience) and outcome of HC investments (knowledge and skills)	Making decisions on HC investments

Source: Bilan, Mischuk and Dzhyhar (2017)

Bilan et al. argued that basing existing theoretical studies on human capital factors fuzzy logic method shall be applied in identifying their impact upon the interest on human capital use (wages). The suggested approach allows determining the factors

impossible to describe through quantitative indicators, i.e., gender, education level, experience. Unlike traditional approaches, such as ranked assessments or investment cost indicators in the formation of certain human capital components, the use of the proposed methodology for analyzing the link between human capital factors and remuneration allows applying real characteristics of the human capital of employees. Appropriate assessment can be the basis of modelling and correction of relations in determining wages and suitable decision-making regarding the development and changes in the structure of the human capital of the company.

RESEARCH DESIGN

3.1 Research Population

Tourism is Sabah's third largest and one of the important incomes generating sectors which supports more than 80,000 jobs before COVID-19 occurs (Sabah Tourism, 2020). The tourism sector in Sabah is also affected by the China government's decision to suspend travels abroad for its citizens (Lajiun, 2020). From Ministry of Tourism, Arts and Culture Malaysia (MOTAC), the total registered number of travel operating business and travel (TOBTAB) is 697 companies in Sabah (MOTAC, 2020).

3.2 Sampling Frame

Convenience sampling technique will be applied for this research. It is a type of non-probability sampling method where the sample is taken from a group of people easy to contact or to reach. Edgar and Manz (2017) stated that it is the most common form of non-probabilistic sampling, and conveniently located around a location or internet service. This sampling technique is suitable during the movement control order is still in exercise.

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CREATIVE INDUSTRIES: AN OVERVIEW

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Abstract

The purpose of this study is to provide an overview on creative industries in general, creative industries in Malaysia and creative industries in Sabah. The literature review is organised in a way that presents the general overview of the research done in the creative industries for journal articles, proceeding, books and online news which is related with the keywords and research topic. This paper discusses the literatures that had been reviewed on the definition and related terms in creative industries, creative industries in Malaysia, creative industries in Sabah, challenges and government support to improve the creative industry landscape. Review of creative industries from various forms of information and knowledge that shows the creative industries needed further empirical research to uncover related issues faced by creative entrepreneurs in Malaysia. Therefore, creative industries contribute to job creation as well as to strengthen the national economy.

Keywords: Creative industries, creative economy, entrepreneurship, creative entrepreneurship, creative entrepreneur

Introduction

United Nations Conference on Trade and Development (UNCTAD, 2022) on October 7, defines creative industries as cycles of creating, producing and distributing goods and services that use creativity and intellectual capital as primary inputs. Further reported, creative industries in year 2020 was conquer by China is the biggest contributor to exporter of creative goods (\$169 billion), second followed by the United States (\$32 billion), Italy (\$27 billion), Germany (\$26 billion) and Hong Kong (China) (\$24 billion). Many countries not only depending on agricultural and industrial but move to creative economy. A study conducted by Che Arshad and Irijanto (2022) pointed out that the creative industries strongly linked with innovation and creative elements that stimulating economic growth among Association of Southeast Asian Nations (ASEAN) countries before and during the COVID-19 pandemic. Government of Australia in year 1994, first using the creative industries term that appear as "Creative Nation" (Afriantari and Harikesa, 2020). While in United Kingdoms the creative industries start as below:

The formal origins of the concept of creative industries can be found in the decision in 1997 by the newly elected British Labour government headed by Tony Blair to

establish a Creative Industries Task Force (CITF), as a central activity of its new Department of Culture, Media and Sport (DCMS). (Flew, 2012, p.9).

Moreover, DCMS stated creative industries as businesses that are based on individual creativity, talent and skill, and that have the potential to create jobs and wealth through the generation and exploitation of intellectual property (UNCTAD, 2022, p.4) under the topic "Creative Industry 4.0 Towards A New Globalized Creative Economy". In addition, creative economy defines as "a transactional activity of creative products which are goods and services that have economic value" stated in his book "The Creative Economy: How People Make Money from Ideas" (Howkins, 2001, p.8). Table 1, below show the summary of the differences between creative industries and creative economy.

Table 1: The summary of creative industries and creative economy

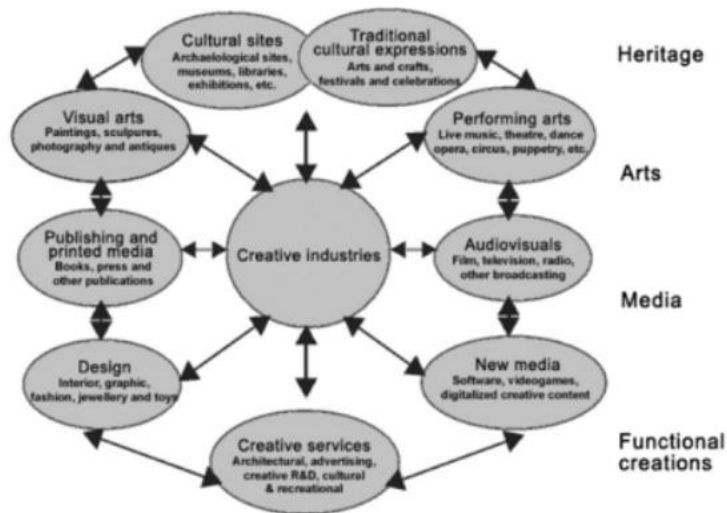
Creative industries	Creative economy
<ul style="list-style-type: none"> • are the cycles of creation, production and distribution of goods and services that use creativity and intellectual capital as primary inputs. • constitute a set of knowledge-based activities, focused on but not limited to culture and heritage, potentially generating revenues from trade and intellectual property rights. • comprise tangible products and intangible intellectual or artistic services with creative content, economic value and market objectives; and • stand at the crossroads of the artisan, services and industrial sectors. • are at the heart of the creative economy. 	<ul style="list-style-type: none"> • is an evolving concept based on creative assets potentially generating economic growth and development. • fosters income generation, job creation and export earnings while promoting social inclusion, cultural diversity and human development. • embraces economic, cultural and social aspects interacting with technology, intellectual property and tourism objectives. • is a set of knowledge-based economic activities with a development dimension and cross-cutting linkages at macro and micro levels to the overall economy. • is a feasible development option calling for innovative, multidisciplinary policy responses and interministerial action.

(Source: Creative Economy Outlook, UNCTAD, 2022, p.18)

In year 2001 DCMS identified creative industries consist of advertising and marketing; architecture; crafts; design and designer fashion; film, TV, video, radio and photography; IT software and computer services; publishing; museums, galleries and libraries; music performing and visual arts stated by Centre for Economics and Business Research (Cebr, 2018). Furthermore, UNCTAD in year 2008 indicates the creative industries sub-sector industry illustrated in the figure 1. Thus, creative industries associate to entrepreneurship activities. Entrepreneurship is the driver of innovation, societal health and wealth that associated with critical agent of economic growth (Bosma, Hill, Ionescu-Somers, Kelley, Levie & Tarnawa, 2020; OECD, 2017). Creative entrepreneurship displays the enterprising spirit and activities towards generation of cultural and creative values by pleasing their cultural consumers' demand for expression, entertainment, spiritual fulfilment and identity reinforcement (Albinsson, 2018; Werthes, Mauer, & Brettel, 2018; Rae, 2007). Burton (2003) explained that day to day work of creative entrepreneurs is to execute the creative

ideas into creative product. Nonetheless, creative entrepreneur refers to someone who innovates cultural and creative products or services and who uses entrepreneurial principles to organize and manage creative activity in a commercial context (HKU, 2010).

Figure 1: The Creative industries Sub-sector



(Source: UNCTAD, 2008, p.14)

Creative Industries in Malaysia

Bernama (2021) reported that the creative industry contributed 1.9 per cent or RM29.4 billion to the Gross Domestic Product (GDP) in year 2019. Unfortunately, during covid-19 pandemic, creative industries most affected (UNESCO, 2021). To achieve the Vision 2020, the Malaysian government has identified the creative industries and creating the Dasar Industri Kreatif Negara (DIKN, National Creative Industry Policy) in the year 2009 (Barker & Lee, 2017). In Malaysia context, DIKN (2009, p.4) define the creative industries is the mobilization and production of individual or group abilities and talents based on creativity, innovation and technology towards the acquisition of economic outcomes and high income to the country through the emphasis on aspects of works and intellectual property in line with the culture and noble values of racial diversity in Malaysia. DIKN refers to the definition of creative industries from developed countries such as United Kingdom, Singapore, South Korea, New Zealand, Australia and UNESCO. DIKN divided the creative industries into three sub sector industries such as creative multimedia, creative cultural arts and creative heritage (Table 2).

Table 2: DIKN sub-sector industries of creative industries

Multimedia	Cultural Arts	Cultural Heritage
Film and TV	Crafts	Museum
Advertising	Visual Arts	Archives
Design	Music	Restoration
Animation and Digital Content	Performing Arts	Preservation
	Creative Writing	
	Fashion and Textiles	

(Source: Ministry of Information, Communication and Culture, 2009)

Therefore, as an example, Tan Sri P. Ramlee is a creative entrepreneur icon in Malaysia. Back to the golden years, early 1950s till the late 1960s, is the year Malaysia cinema that close to the heart of Malaysia fans. P. Ramlee is a filmmaker, composer, scriptwriter, singer and musician that succeeded directed 34 films and acting in 26 (Ahmad & Lee, 2015). He also a comedian who could pair with other artists of the world such as Gilbert and Sullivan from England and Rodgers and Hammerstein from USA (Adnan, 2015). His film, the "Seniman Bujang Lapok" nominated for the Best Comedy Film for the 9th Asian Film Festival in Tokyo (Aljunied, 2005). Abdul Hamid (1999, p.35) stated that, P. Ramlee achieved the title "The Most Versatile Talent, obtained from the 10th Asian Film Festival award in Tokyo 1963, from "Ibu Mertuaku" film. Additionally, P. Ramlee has composed and produced more than 300 songs during his musical journey (Mohamad Seperah & Syed Mohammed, 2020).

Creative Industries in Sabah

A Sabah state government committed to developing the creative industries. Tan Sri Musa Haji Aman had congratulated Institute for Development Studies (IDS) and related agencies that recognised four important sectors, specifically oil and gas, agriculture, tourism and included creative industries to enhancing the Sabah's economic security (Borneo Post Online, 2015). Also stated that, Dr. Dayang Aminah Ali is the person who presenting the paper in the seminar and highlighting the importance of creative industries (Borneo Post Online, 2015). Furthermore, Tan Sri Musa Haji Aman has expressed confidence that the creative industry in Sabah can grow into a dynamic sector in the future (New Straits Times, 2017). Chief Minister Datuk Seri Hajiji Haji Noor highlighted the importance to promoting the ethnic culture as a wealth of the states' economic through tourism, creative art industry that involving the small and medium-sized community-based industries in Sabah (Daily Express, 2022). IDS (2020) pointed out the creative industries comprise of three main sub-industries that are interconnected with each other, namely performing arts, cultural heritage and creative media. For examples performing arts through songs or theatre, cultural heritage such as handicraft, cuisine and cultural-based (homestay, cultural events) products and creative media like documentary, commercial

photography as well as filmmaking (IDS, 2020). Briefly history the development of modern art in North Borneo or Sabah in table 3 below illustrate the chronology.

Table 3: The development of modern art in North Borneo

North Borneo
1946- British Council Jesselton
1952- Kent Teachers Training College
1963- Gaya Teachers Training College
1965- Sabah Museum
1984- Sabah Art Gallery

(Source: Hasan & Sahari, 2021)

The gurus of oil paints and water colour during the late 40s and 50s in Sabah are Murshidi Nambi, Simone C.Yew and K. Bali (Hasan & Sahari, 2021). In their study revealed that Murshidi Nambi, Simone C.Yew and K. Bali passion of art inspired their students to participate in art journey. K.Bali also one of the earliest novelists in Borneo and arts teachers from Britain such as Lucille Plunkett, Tina Rimmer, and Peter Harris (Hasan & Sahari, 2021). The virtual art, music, craft making and handiworks syllabus included in Kent Training College and Gaya Training College in 1962. Later, in year 1965, Sabah Museum and Sabah Art Gallery 1984 were established to support the development of cultural and art activities in Sabah.

Creative Entrepreneurs in Sabah

Figure 2: Datuk Mohd Yaman Ahmad Mus



(Source: Borneo Post Online, January 28, 2013)

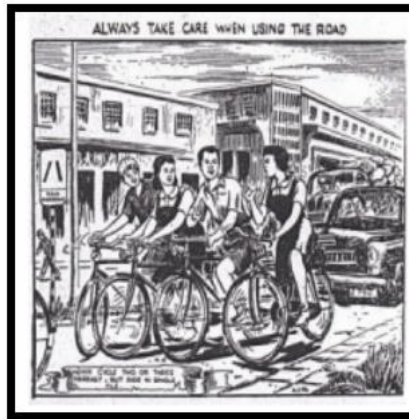
Figure 2, the late of Datuk Mohd Yaman Ahmad Mus is a versatile artist was born in Kampung Tebongon Putatan Kota Kinabalu Sabah on Sept 29, 1938 (Borneo Post, 2013). Through his lifetime, he had given a huge impact on the development of arts activities in Sabah. He is the co-founder and established the Sabah Art Club in Kota Kinabalu in 1958 and become the first student from Sabah study art overseas in 1963 (Hasan & Sahari, 2021). One of his innovations and creative ideas is to build the Sabah Art Gallery with the unique design. Moreover, he also a designer of the Sabah flag and painted many artworks from various mediums. A study conducted by Rahim, Ibrahim and Zakaria (2015, p.99), shows Yaman Mus artwork slogan "Art for the People" that can bring benefits to the global community of harmony and happiness. Figure 3 and 4 below illustrated his art design and comics artworks.

Figure 3: Sabah Art Gallery



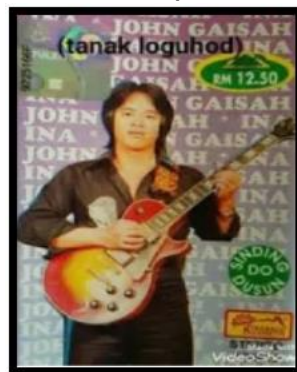
(Source: Borneo Post Online, 2013)

Figure 4: Datuk Yaman Mus artwork



(Source: Anak Sabah, January 1957, cited in Rahim, Ibrahim & Zakaria, 2015, p.90)

Figure 5: Datuk Lapius John Gaisah



(Source: SCENIC Website, 2021)

Figure 5, the late of Datuk Lapius John Gaisah as well-known as Sabah's Tom Jones was born at Kampung Sunsuron Tambunan, had carved a name for himself in the industry after winning third place in the Bintang RTM 1976 competition which was won by the late Sudirman Arshad (Borneo Post, 2012). He is the Kadazandusun Murut (KDM) music legend icon that succeeded highlighted KDM language lyrics. For

instance, the song *Oi Gidi* convey the positive value such as love, respect and appreciate the mother as a human being who has given birth and raised a child (Kiting, Sintian, Osup & Fabian, 2020). Figure 6 below exhibited the lyrics of “Oi Gidi” sung by Datuk John Gaisah.

Figure 6: Song by Datuk John Gaisah

Oi Gidi	
Singer: Datuk John Gaisah	
<i>Kada kasusa oi gidi</i>	Don't worry O mother
<i>Balian tia tinggetan</i>	I will buy the betel
<i>Di kada'd tumangob</i>	Don't panic
<i>Di kada'd kumaus</i>	Don't sulk
<i>Di balian tia nogi salapa</i>	I will also buy the salapa
<i>Balian ku nogi iya sirung</i>	I will also buy the sirung
<i>Sirungan nu mangamat</i>	To cover the head while cropping the paddy
<i>Kada ma lihuai</i>	But don't forget
<i>Soira ka mangamat</i>	When reaping later
<i>Do oluan aku no parai wagu</i>	Leave the new paddy for me
<i>Balian tia nunu nopo</i>	I will buy anything
<i>Nga kada ku sansagai manansawa</i>	But don't force me to get married
<i>Kosukup go tusin ku</i>	When my money is enough
<i>Mamurasou aku nogi</i>	I will give some thoughts
<i>Om mogihum nogi tantok tinar</i>	And search for a partner

(Source: Kiting, Sintian, Osup & Fabian, 2020, p.921)

Figure 7: Datuk Deddy M. Borhan



(Source: Borneo Post Online, 2022)

Datuk Deddy M. Borhan was born in Tuaran Sabah, as entrepreneurs that producing of films under his own company, Sabah Film Production Sdn. Bhd. in figure 7 (Junaidi, Dawam & Sareya, 2021; Ahmad, 2008). In 1975, he produces comedian film, *Keluarga Si Chomat*, *Hapuslah Air Matamu (1976)*, *Pendekar (1977)*, *Si Badol (1978)*, *Kisah Seorang Biduan (1979)*, *Toyol (1980)*, *Sumpah Semereh Padi (1981)*, *Mat Salleh Pahlawan Sabah (1983)*, *Manis-Manis Sayang (1983)*, *Talak (1984)*, *Papar-Pagar Cinta (1984)*, *Di Ambang Kasih (1984)* and year 1984 his hit film *Azura* where Ogy Ahmad Daud and Jamal Abdillah played in the film that generate RM1 million and *Yang Disayangi (1992)* (Hisham, 2013; Junaidi, Dawam & Sareya, 2021). He is not only the firm director but also an actor and singer.

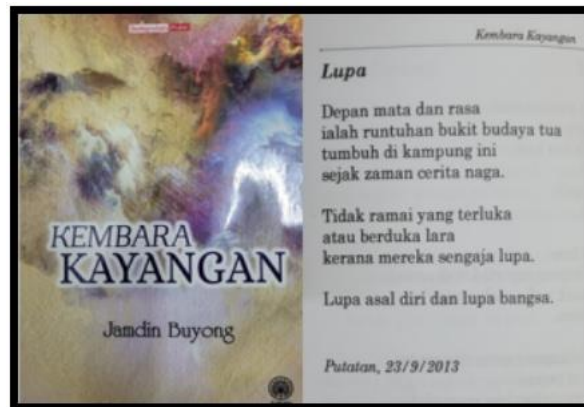
Figure 8: Datuk Jamdin Buyong



(Source: Poliana Ronnie Sidom photograph in Berita Harian, 2017)

Figure 8, Datuk Jamdin Buyong is the role model in language, literature and culture in Sabah and his book title, "Rona-Rona Bahasa Kita" was received the Best Book Award from Sabah Chief Minister's in Sandakan year 2017 (Berita Harian, 2017). His roles using the art as a medium to give awareness to the colonised society of the dangers of poverty, backwardness and the continuation of colonialism (Joko, Gapar, Annuar, 2020). He also published his poetry collections in "Kembara Kayangan" and "Lupa" is one of his poetry collections (Figure 9).

Figure 9: Poetry "Lupa"



(Source: Kembara Kayangan, Buyong, 2018, p.60)

Figure 10: Tony Francis Gitom



(Source: Finas Photograph in Berita Harian, 2020)

Tony Francis Gitom is one of the talented film directors in Sabah that popular with "Drama Cinta Antara Benua" and "Syurga Di Pintu Neraka" still active in his passion for multimedia (figure 10, white t-shirt with cream pants). In a study conducted by Sibangan, Lee and Siang (2019) shown that telemovies used Malay and local Sabahan language are Tony Francis Gitom creative ideas (figure 11).

Figure 11: Tony Francis Gitom's telemovies used Malay and local Sabahan language.



(Source: Sibangan, Lee & Siang, 2019 p.23)

Figure 12: Abu Bakar Ellah or known as Ampal



(Source: Finas Photograph in Berita Harian, 2020)

Figure 12 (Black shirt with Penan haircut styles) Abu Bakar Ellah is the comedian, actor, singer, lyric writer and film maker. Ampal humourist and multi-talented that communicate his message through Orang Kita or Our People with his song lyrics as below (figure 13). Lim and Yamamoto (2012) in their study concluded, Abu Bakar Ellah telemovies reflect Sabahan identity can be fostered without being 'anti-anything'.

Figure 13: Final part of the song by Abu Bakar Ellah

<i>Sifat rendah diri</i>	To keep a humble attitude
<i>Hormat-menghormati</i>	To pay respect to each other
<i>Berbudi pekerti</i>	And to be well disciplined
<i>Adalah . . .</i>	That is
<i>Orang kita</i>	Our people
<i>Pura-pura lupa</i>	To pretend to forget
<i>Suka angan-angan</i>	Like to dream
<i>Lupa asal-usul</i>	And to forget one's origins
<i>Adalah . . .</i>	That is
<i>Orang kita</i>	Our people

(Source: Lim & Yamamoto, 2012, p.127)

Challenges To Sabah Creative Industries

The Coronavirus (Covid-19) pandemic effected world industry's activities that associated with loss of income, stress, sickness and loss of life. Like other countries, Malaysia also has implemented the Movement Control Order (MCO) to control the public from direct contact with other parties that expose them to Covid-19 or spreading the disease without realising it. A study conducted in Sabah revealed that the implementation of MCO which almost to 24 weeks by government has created negative outcome, especially performing art player (Magi, Mapjabil, Arus, Sareya, Eranza & Min, 2020). In their study, they are using in-depth interview form guides, focus group interviews and observations that also exhibited to the beginning utilizing the social media and virtual meetings as a platform for substitute the face-to-face activities.

Intellectual property issues faced by local artist in Sabah, as mentioned by Deputy Chief Minister Datuk Seri Dr. Jeffrey Kitingan the artistes had long been neglected and their efforts in producing high quality and entertaining ethnic music had not received adequate support in the past 35 years (The Star, 2022). Moreover, he further revealed, a musician only received RM13.57 for one of his hit songs whereby a Peninsular Malaysian artiste received at least RM200. A preliminary study conducted by Azmi and Alavi (2017) also highlighted the copyright issues in the Malaysian music industry. Next, an example of the plagiarism controversy issue faced by artist Crig Francis has led to more artists in the Sabah to learn about intellectual property rights (New Straits Times, 2019).

Less opportunities given to the creative entrepreneurs in Sabah. According to Jamil, Dawam and Ali (2016) revealed that the good relationship between interested parties from ministry or Rancangan Television Malaysia (RTM) are more important compared to the firm capability or ability in producing the quality television programme. Consequently, this situation exposed to the monopoly and cronyism in these industries.

The Sabah Kadazandusun Murut Welfare and Education Association (Pekadin) has proposed to the state government to own a TV station (Borneo Post Online,

Oktober 7, 2022). When Sabah owns a television station like Sarawak (TVS), it gives more opportunities for local creative entrepreneurs to show their talent.

Poor internet connectivity and infrastructure may affect the business activities in Sabah. For example, Labuan facing poor internet connection as mentioned by Association of Labuan Trust Companies (ALTC) Chairman Datuk Chin Chee Kee could be catastrophic for businesses, exposing them to the risk of losing revenue, reduced productivity and customer complaints (Daily Express, December 20, 2022). Additionally, he further claimed that due to poor internet connections may interrupt the dealing with outside customer such as payment processing and video conferencing. Also highlighted by Deputy Chief Minister Datuk Seri Bung Moktar Radin that several investors come to Sabah but cannot realise it due to unsatisfactory electricity and water supply as well as poor road conditions (New Straits Times, August 14, 2022).

Furthermore, digitalization and technology adaptation, whether creative entrepreneurs in Sabah prepare in the psychological aspect to upgrade their knowledge and skills to face uncertainties and see it as positive opportunities to grow the business. For example, a Sabah-born artist Red Hong Yi has sold her first Non-Fungible Token (NFT) artwork for 36.3 ETH, which is currently valued at more than RM320,000 (Daily Express, July 13, 2021). Moreover, NFTs are unique digital assets representing real-world objects and the transactions of NFTs are recorded on the blockchain - a decentralised digital ledger (Daily Express, July 13, 2021). Now, the economic transaction enters the metaverse world. Are creative entrepreneurs in Sabah aware in this situation.

Finally, high cost of producing good quality of the film required for more fund. Besides the government support, are creative entrepreneurs in Sabah are ready enough to collaborate and globally connected with investors outside Sabah. High competition from the foreign film industry may threaten the local film industry (Rosnan, Ismail & Daud, 2010). When dealing with creative entrepreneurs outside Malaysia, do local creative entrepreneurs aware of the legal process in this industry. On top of that, the following paragraph elucidated the government support to creative industries in Sabah.

Government Support to Creative Industries

The Federal and State government work together to uplift the creative industries in Sabah from the non-financial and financial aspects. Firstly, the non-financial aspect emphasis on strengthens the human capital through the process of training and education that strongly related to the creative industries in Sabah. Universiti Malaysia Sabah (UMS) established the Academy of Arts and Creative Technology (ASTiF) in the year 2021 that offering programmes such as Creative Arts Programme, Music Arts Programme, Visual Arts Technology Programme and Cinematography Programme (Pangayan, 2022). UMS also embedded to each programme with fundamental of entrepreneurship acculturation to encourage the undergraduate engages in entrepreneurial activities (Nasip, Amirul, Sondoh, Tanakinjal, 2017). University College

Sabah Foundation (UCSF) developed an animation centre known as Sabah Animation's Creative Content Centre (SAC3) focuses on Sabahan youth animation training connected with wow BIMP-EAGA group (Daily Express, 2015). College Yayasan Sabah's (KYS) also conducted hands-on training on batik production as well as marketing and entrepreneurship concept (Borneo Post Online, January 27, 2013). Sabah Institute of Art (SIA) offered a diploma in Architecture Studies, Interior Design, Music Studies, Fashion Design and Graphic Design to tapped in the creative industries market (Borneo Post, 2019).

Moreover, to encourage the village folk engage in the creative economy, a seminar to nurture Sabah's rural creative communities was conducted by IDS, in partnership with German-based think tank Konrad-Adenauer-Stiftung and in collaboration with the Society of Performing Arts Kota Kinabalu (New Straits Times, 2017). In addition, Sabah International Convention Centre (SICC) is world standard performing art centre to cater regional and international concerts (Borneo Post Online, 2017). Thus, Sabah Creative Economy and Innovation Centre (SCENIC) is hoping that its newly launched building could help to increase the level of awareness of technology and creativity programmes in the state (Borneo Post Online, 2022). Sabah Art Gallery committed to support local talents by inviting everyone to discover and experience art, creativity and shared humanity through the WOW Project (Daily Express, 2022). During a Covid-19 pandemic, Sabah government has allocated close to RM1.2 million for players in the tourism and creative industry (New Straits Times, 2020). Yayasan Sabah Group owned the Galleria Artisan and managed by Kristal Handal Sdn. Bhd is the platform for local handicraft entrepreneurs to promote their product and boost the income (Daily Express, 2019). Daily Express (2022) reported May 15, Sabah Youth and Sports Ministry implemented the Start-Up Programme, Co-Youth Programme, and Youth Development Creative Business to empower the youth in entrepreneurship.

The National Film Development Corporation Malaysia (FINAS) Chief Executive Officer, Prof. Dr. Md. Nasir Ibrahim suggested that Sabah needs to establish a think tank which involves many parties such as directors, producers, actors, crew, distributors, exhibitors, and all those involved in this industry, including academics to advance its film industry (New Strait Times, 2022). MyCreative Ventures Sdn. Bhd. or MyCreative was incorporated on April 20, 2012, under the Malaysian Companies Act 1965 to boost the creative activities such as visual arts, performing arts, music, literature, content creation, fashion, traditional & cultural arts, culinary arts, design and creative education (Daily Express, 2022). Furthermore, the MyCreative Group established its subsidiaries, "Riuh" and the Economic Development Agency of Cultural Art (Cendana) in 2017 function to further support creative activities and under National Budget 2022 government allocated RM20 million towards Riuh Keluarga Malaysia Programmes while RM30 million was allocated to elevate local animation (Daily Express, 2022). According to Bernama (2022) reported on December 17, Malaysia Digital Economy Corporation (MDEC) has channelled grants totalling RM7.2 million to 34 creative industry players this year, has been mentioned by the Communications and Digital Minister Fahmi Fadzil.

Conclusion

Creative industries important to the national economy. Each party played an important role in the development of creative industries in this country. Creative nations through the process of creative entrepreneurship led to job creator and wealth creation. Despite challenges in creative industries, the government provides support from financial and non-financial aspects. Hence, there is a room for improvement to all parties to express their ideas and implement innovative product as well as work together to achieve the status of a developed country. Our review article conducted a narrative synthesis. Future empirical study is needed from quantitative (i.e., survey) and qualitative study (i.e., in-depth and focus group) to investigate and understand the performance of creative entrepreneurs in Sabah, which is so unique with multi-racial, diverse cultures and rich backgrounds of natural resources. Creative industries portray the value and lifestyle of the national identity. Therefore, this study gives some insight to future researchers into the creative industries in Sabah.

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THE INTENTION TO EMBEZZLE THE FINANCIAL MANAGEMENT OF STUDENT INSTITUTIONS: GROUP CONFORMITY AND UNDERSTANDING OF *TRIPANTANGAN*

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Purpose and Background

Embezzlement is an act carried out by a person who deliberately takes away the rights of an object belonging to another person and can result in unfavorable benefits for individuals, entities or other parties. Student institutions have great potential in cases of embezzlement of financial management. Usually, student institutions do not have a good internal control system like other large institutions. The existence of embezzlement in institutions is inseparable from one's intentions. If a person has good thoughts, then there is no intention to commit embezzlement and vice versa if they have bad thoughts then there is no intention to commit embezzlement. Factors influencing the intention to embezzle financial management are group conformity and understanding of *the tripantangan*. Group conformity is a change in a person's behavior due to pressure from others. Group conformity can be both positive and negative. The understanding of *tripantangan* is an understanding of the teachings of Ki Hadjar Dewantara which consists of three prohibitions or taboos, namely abstinence from abusing power or authority, abstinence from misusing finances and abstinence from violating decency.

The update in this study is first, most researchers discuss tax evasion but, in this study, discuss embezzlement of financial management. Second, this research was carried out in student institutions. Third, researchers use one of the Tamansiswa teachings, namely *tripantangan*. This study aims to determine the influence of group conformity on the intention of embezzlement of financial management of student institutions and the understanding of *tripantangan* affects the intention of embezzlement of financial management of student institutions.

Methodology

The research method uses quantitative by using questionnaires as a primary data source in the form of google form links that are distributed to students who take part in student institutions at the University of Yogyakarta. The sampling method uses quota sampling.

Results and Findings

The results of this study are in the form of data quality tests, classical assumption tests and hypothesis testing. There are two data quality tests, namely validity tests and reliability tests. Uji validity in this study indicates that all items are declared valid.

This can be proved by *the r-count value* $>$ *r-table* (0.187). The reliability test is a variable which can be said to be reliable if it has a Cronbach Alpha value of $>$ 0.60. The reliability test results in this study show that all items can be declared reliable. This can be evidenced by the group's conformity reliability value showing an Alpha Cronbach value of $0.669 > 0.60$, *understanding* that Alpha Cronbach is $0.636 > 0.60$, and the intention to embezzle financial management shows an Alpha Cronbach value of $0.853 > 0.60$.

The classical assumption test used in this study consists of a data normality test, a multicollinearity test and a heteroskedasticity test. Test the normality of the data using the *Kolmogorov-Smirnov* method and in this study obtained *Exact Sig. (2-tailed)* is worth 0.087 where the result is greater than the significance level of 0.05 and means that the data used are normally distributed. Furthermore, the multicollinearity test if the tolerance value $>$ 0.10 is equal to the VIF value $<$ 10, it is certain that multicollinearity does not occur. In this study, it was found that the tolerance value of group conformity and *tripantangan* understanding was 0.983 and the VIF value was 1.017, so it can be concluded that both variables did not occur multicollinearity. The heteroskedasticity test in this study used *spearman's rho*, if the significance value $>$ 0.05 then heteroskedasticity did not occur. In this study, the results of the significance of group conformity of 0.070 and *tripantangan* understanding of 0.859 were known, so it can be concluded that both variables do not occur heteroskedasticity.

Hypothesis testing uses a fit model test (F test), a partial test (t test) and a coefficient of determination test (R²). Model fit test (F test) if the significance value $<$ 0.05 then the hypothesis is accepted or one of X₁ and X₂ affects Y. In this study, a significance result of $0.000 < 0.05$ was obtained, then it is stated that the hypothesis is accepted or one of X₁ and X₂ affects Y. Furthermore, if the F value counts $>$ F table value then the hypothesis is accepted or one of X₁ and X₂ affects Y. The result obtained from F count is 13.247, then $13,247 > 2.69$ so that it is stated that the hypothesis is accepted or one of X₁ and X₂ affects Y. Subsequent hypothesis testing partial test (t test) is that if the significance value $<$ 0.05 then the hypothesis is accepted, or the independent variable affects the dependent variable. The test results obtained the results of the significance of group conformity of $0.000 < 0.05$, the calculated t value of $3.790 > 1.98197$ with a beta coefficient of 0.331 means that the hypothesis is accepted, or the conformity of the group has a positive effect on the intention to embezzle financial management. The result of the significance of the understanding of *tripantangan* of $0.004 < 0.05$, the calculated t value of $-2.960 < 1.98197$ with a beta coefficient of -0.258 means that the hypothesis is accepted or the understanding of *tripantangan* negatively affects the intention to embezzle financial management. Finally, the coefficient of determination test (R²) obtained a result of 0.198, meaning that 19.8% of variables bound by the intention of embezzlement of financial management were explained by free variables, namely group conformity and *tripantangan understanding* and the remaining 80.2% were explained by other variables outside of the variables used in this study.

The results of this study are known that group conformity has a positive effect on the intention to embezzle financial management and the understanding of *tripantangan* negatively affects the intention to embezzle financial management. The

implications in this study are to be used as a consideration and reference source for the management related to financial embezzlement in student institutions both in providing knowledge about group conformity and *tripantangan* to avoid financial embezzlement intentions. The weakness in this study is that it only uses one data source, namely using questionnaire answers that sometimes do not show the respondents' actual answers, because sometimes respondents have different thoughts and understandings and respondents' honesty in filling out the questionnaire. Suggestions for further research are expected to add data sources such as interviews or other data sources to be considered in expressing the intention to embezzle financial management.

Keywords: Group conformity, *tripantangan* understanding, embezzlement intent, student institutions

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THE INFLUENCE OF DISCRIMINATION AND APPLICATION OF THE *TRI NGA* TEACHINGS ON INTENTIONS FOR TAX EVASION

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Abstract

Taxes are one of the largest and most important sources of state revenue because they can support the Indonesian economy. Every taxpayer is required to contribute to pay taxes in accordance with the provisions of the applicable law. This research was conducted to find out how discrimination and the application of the *tri nga* teachings relate to tax evasion intentions. This study uses two independent variables, namely discrimination and application of the *tri nga* teachings, and one dependent variable, namely intention to evade taxes. This research uses the theory of planned behavior. This research is quantitative in nature where the results of the data are in the form of numbers. Data collection in this study was carried out using the accidental sampling method in the form of a google form. This study used primary data by distributing questionnaires in the form of google forms to respondents who then analyzed the data using the IBM SPSS Statistics 20 program. The sample used in this study were active students at the Universitas Sarjanawiyata Tamansiswa, Yogyakarta, totaling 120 students.

Literature Review

Discrimination is an act that causes reluctance of the public or taxpayers to fulfill their tax obligations. In the field of taxation, discrimination is a condition where the directorate general of taxes differentiates the treatment of each taxpayer (Fatimah & Wardani, 2017)

Tri nga is one of the tamansiswa teachings. The concept of *tri nga* consists of *understand*, *feel* and *do*. The purpose of learning is the basis for increasing students' knowledge of what they are learning to increase their sense of understanding and increase their ability to do what is learned (Indarti, 2019).

The intention of tax evasion is the desire of the taxpayer not to fulfill all tax obligations and to exercise his tax rights in accordance with the provisions of the tax law. The intention of tax evasion can be defined as a way to minimize or even completely erase the amount of tax owed or shift the burden of tax owed which is a violation and is not in line with the provisions of the tax law (Wardani & Rahayu, 2020) .

Result & Discussion

The results of this study indicate that the validity test is declared valid on the discrimination variable and the *tri nga* teaching variable with an r count value greater

than the *r* table value. The results of the reliability test showed that the discrimination and teaching variables were reliable, supported by a *cronbach's alpha value* greater than 0.6. The results of the normality test for the significance value or the asymp value. Sig. (2-tailed) of 0.050 > 0.05. With the results of the t test on the discrimination variable (X1) it has a t count of 2,689 > t table of 1,980 and the variable application of the *tri nga* teachings (X2) has a t count of 1,506 t table < 1,980.

Based on the results of data processing from testing hypothesis 1 concluded that discrimination has a positive effect on the intention of tax evasion. This result is proven by the t test value where the *standardized beta coefficient* is 0.239, the significance value is below 0.05, namely 0.008. Based on the test results, then H1 is accepted. The results of the research on discrimination variables in this study support the *theory of planned behavior* which explains that discrimination has a strong influence on tax evasion intentions. This theory explains that discrimination can occur due to external pressure or encouragement that can make a person's perception. The effect of discrimination can be a cause that influences the perception of taxpayers related to acts of tax evasion (Sudiro et al., 2020).

Based on the results of data processing from testing hypothesis 2, it is concluded that the application of the *tri nga* teaching has no effect on tax evasion intentions. This result is proven by the t test value where the *standardized beta coefficient* is 0.134, the significance value is below 0.05, namely 0.135. Based on the test results, H2 is accepted.

Conclusion

The results of research on the variable application of the *tri nga* teachings in this study support the *theory of planned behavior* which explains the existence of the *tri nga* concept consisting of *understanding, feeling* and *doing* (Nadziroh, 2017). Related to this theory where the *tri nga* teaching teaches obligatory taxes to apply the good impact of taxes in everyday life that tax compliance makes many benefits so that taxpayers will not do tax evasion. The higher the understanding of the *tri nga* teachings, the less tax evasion will be.

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THE RELATIONSHIP BETWEEN HUMAN RESOURCE MANAGEMENT MOTIVATION PRACTICES AND EMPLOYEE ENGAGEMENT IN UNIVERSITI MALAYSIA SABAH (UMS), KOTA KINABALU, SABAH

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Abstract

The study investigates the relationship between Human Resource Management (HRM) motivation enhancing practices and employee's engagement. If employers provide resources towards employees for their workers achieving own goals, employees tend to give something in return therefore employees more engaged towards organizational. This study collects survey data from employees who are working in the public educational sector in Sabah Malaysia. The views involved 77 respondents using convenience sampling. For data analysis, this research applied Statistical Package for Social Sciences (SPSS) version 24.0 and SmartPLS version 3.0 software. Based on the result obtained, the HRM motivation enhancing practices such as job security and performance feedback were significantly related to employee engagement except for career advancement, which is shown to be not significantly related to employee level of engagement. The findings showed that career advancement is associated with many responsibilities, therefore higher workload leads to stress and fatigue among employees thus reducing employee's engagement.

Keywords: HRM motivation practices, employee engagement, job advancement, job security and performance feedback

Purpose and Background

Employee's engagement can create a competitive advantage in turbulent times for organization many scholars found that engagement as a key driver of individual behavior and attitude as well as prolonged towards organizational performance, productivity, retention, financial performance, and even shareholder return (Macey, Schneider, Barbera, and Young, 2009). Findings from previous research shown that employees engagement practice are associated with increased individual and firm performance level (Nazir and Islam, 2017). Besides, this finding supported by Mone and London (2010) found employee engagement can be recognized as one of key determinant that fostering high level of employees performance as is constantly shown in a number of studies. Furthermore, motivation enhancing practices dimension have negative relationship with turnover rate therefore, this study will focus on motivation

enhancing practices which is consistent with this study it includes practices such as job advancement, job security and performance feedback which related with employee's motivation function (Jiang, Lepak, Hu, and Baer, 2012).

The study investigates the employee engagement concept and also intended to explore on key drivers on facilitate development sense of employee engagement by examining specifically three drivers included career advancement, job security and performance feedback. Arrowsmith and Parker (2013) argue the relationship between HRM practices and employee's engagement are still unclear and need further investigation in this area. This paper aims to examine the following questions: (i) is there any relationship between job advancement and employee engagement? (ii) is there any relationship between job security and employee engagement? And (iii) is there any relationship between performance feedback and employee engagement?

Methodology

A quantitative approach is used to identify the relationship HR-practices and employee engagement among Universiti Malaysia Sabah (UMS) employees which involved the relationship between the independent variable such as job advancement, job security and performance feedback and it impact towards dependent variable such as employee engagement. Data were collected from higher educational institution of Sabah using self-administered questionnaire. A total of 110 set of questionnaires were distributed and 79 sets were completed and returned. Respondent of this study were the employees from various departments at different position like administrative staff, IT staff, faculty staff and etc. According to G*power suggestion minimum sample size required is 77, therefore the returned questionnaires satisfied minimum recommendation sample. The data was analyzed using two statistical software SPSS version 24.0 and smart PLS 3.0.

Results and Findings

The result reveal that there is not significant relationship between career advancement and employee engagement, t-value score at 1.35 which is lower than 1.645 hence the null hypothesis is accepted. When employee is accountable for more duties it increased stress level due to heavier workloads which can affects employee's physical and mental health such as employees have tendency to experience fatigue headaches, stress which all of this soft negativity outcome is opposite with employee engagement.

Next, the relationship between job security and employee engagement was analysed. From the result obtained, it shows that t-value between these two variables recorded as 3.133 which is higher than 1.654 meaning that null hypothesis rejected thus this construct variables is supported. From previous finding, this finding consistent from previous empirical study whereby the security job level among employee can lead to development of employee engagement.

The relationship between performance feedback and employee engagement was also examined. From the analysis conducted, data reveal performance feedback has significant effect toward employee engagement. Constructive performance feedback about how well employees is doing resulted in employees staying within the organization.

Practical implications

From organizational perspective, the findings show that organizations need to figure out factors that can be used to enhance level of employee engagement and give more focus on it so that employees performance improve from time to time. The findings in this study reveal that by providing more alternatives instead of only one employee engagement method can improve level of engagement. In the long term, it increases employees' productivity level. Hence, strategic human resource management motivation practices are crucial increased operational competency. This finding is useful in managing educational institutions.

Conclusion

Human resource practices have positive outcome on employee level engagement and moreover it improved employees' motivation and enhanced their job performance. It provides comprehensive understanding about how employee engagement link to employee's job performance, job satisfaction and employee well-being. Based on the result of this study, employee engagement is interrelated with intangible variable like employee job security and job performance feedback.

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ECONOMIC GROWTH, UNEMPLOYMENT, POVERTY, AND ECONOMIC DISPARITY: HOW SABAH COMPARES TO THE NATIONAL AVERAGE

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Abstract

Statistics show that the State of Sabah in Malaysia is lagging behind the national average in terms of economic growth, with high unemployment rates and depressed human development advances. This paper compares the economic and human development performance of Sabah to the national achievements for the period between 2010 and 2021; it provides some insights and implications. Growth indicators are analyzed in five sectors that include agriculture, construction, manufacturing, mining and services. It is found that in general, the Sabah economy under performs when compared to the nation, while human development indicators reflect the same trend as the state lies in a stagnant economic position.

Keywords: Economic growth, unemployment, poverty, economic disparity

UNLOCKING THE POTENTIAL OF MOBILE APPS FOR BUSINESS FROM CONSUMER PERSPECTIVE: THE CASE OF DELIVERY SERVICES IN SABAH

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Abstract

This study was conducted to identify the potential of the usage of mobile apps for business from consumer perspective which influences consumer choice in adopting mobile apps. This research has been carried out in 3 main cities of Sabah; namely Kota Kinabalu, Tawau and Sandakan. We proposed to use logit regression analysis and a total of 331 respondents from the consumer segment had taken part in this study. The study found that age, digital society awareness, bar signal, method of payment, delivery services by private runner, consumer preference, location, as well as ping and upload speeds are variables that influence the usage of mobile apps and help the growth of business. Thus, we recommend the authority to develop e-wallet concepts which embedded homogenous functions as internet banking and can be adopted across all income groups. The finding highlighted the importance of private runner and the necessity to create private runner apps is encouraged. The internet speed for household use and as a general purpose should be improved as Sabah is ready for 5G network access. The pricing of internet speed packages must be monitored and controlled by the government. Finally, the Digital Free Trade Zone (DFTZ) is highly recommended in order to realize the digital society concept.

Keywords: Consumer, digital, logit, mobile apps

ANALYSIS OF INCENTIVE MECHANISMS IN HUMAN RESOURCE MANAGEMENT OF CHINA UNICOM IN COVID-19 IN NINGXIA, CHINA

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Abstract

Since the outbreak of COVID-19, in order to control the spread of the virus, all over the world chooses shutdown or home network office, changes in working methods, workplaces, and health threats to the virus, these factors have affected the motivation of employees, and enterprises have also been affected. Enterprises suggested to support employees with more incentives to keep them motivated during the Covid-19, including but not limited to monetary incentives. This study used a quantitative approach and a structured questionnaire as an instrument, However, for the purpose of this paper, the result only will focus on result from literature review or discuss the conceptual perspective. This study aims to analyze the incentive mechanism of China Unicom during Covid-19. This research expected to give some input that can help enterprises understand how employees feel about various incentives and how enterprises can formulate the incentive mechanisms. The research conclusions drawn from this study can be used as experience to provide reference for similar situations that may arise in the future.

Keywords: Incentive mechanism, COVID-19, China

THE SOCIO-DEMOGRAPHIC FACTORS AFFECTING OLDER PEOPLE'S LABOUR PARTICIPATION IN MALAYSIA

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Abstract

Data from the Fifth Malaysian Population and Family Survey 2014 (MPFS-5) is used to analyse the relationship between socio-demographic factors and labour force participation for a sample of 4,059 Malaysians aged 60 and above. A binary logistic regression was used to identify the significant predictors of older Malaysians participating in the labour market after controlling for key demographic, health and socio-economic, geographical and intergenerational support variables. The results showed that older, female respondents, married or widowed respondents were less likely to participate in the labour market than their counterparts. On the other hand, those who were of Chinese background, with more income sources, who lived in rural areas and those residing in Sabah, Sarawak and Labuan were more likely to be in the labour market than their comparison groups. Older people with more education, more difficulty with daily activities, and more health problems were also less likely to be in the labour force than the reference group. These findings have important repercussions for the Malaysian ageing policy, particularly with regard to the country's efforts to promote productive ageing through employment opportunities that can ensure the continued independence and welfare of older Malaysians.

Keywords: MPFS-5, binary logistic regression, labour force, older people, ageing population

EVALUATION STUDY OF SUSTAINABLE LIVELIHOOD ABILITY AMONG DOMESTIC MIGRANTS FROM POVERTY ALLEVIATION RELOCATION IN LIANGSHAN PREFECTURE, CHINA

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Abstract

Eliminating poverty is a challenge for all countries. China completed the arduous task of eliminating extreme poverty. The relocation project from inhospitable areas is an important part of China poverty alleviation project. However, many domestic migrants find it difficult to obtain stable livelihood activities after relocation. This paper constructs the evaluation index system of the sustainable livelihood ability after relocation, using the principal component analysis method to evaluate the sustainable livelihood ability level after relocation, compare and analyze the sustainable livelihood ability of domestic migrants with different livelihood strategies in different regions of Liangshan Prefecture.

Keywords: Sustainable livelihood ability, evaluation study, domestic migrants, Liangshan Prefecture

FAKTOR YANG MEMPENGARUHI PENINGKATAN PRODUKTIVITI DALAM KALANGAN GURU SEKOLAH MENENGAH DI NEGERI SABAH

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Abstrak

Profesion perguruan merupakan bidang tugas yang sungguh mencabar memandangkan bidang tugasnya yang begitu banyak dan tanggungjawabnya yang begitu berat untuk dipikul oleh setiap orang yang bergelar guru atau pendidik. Di Malaysia, persoalan mengenai produktiviti dan tekanan kerja dalam kalangan guru juga menjadi topik hangat dalam banyak bidang penyelidikan. Selain daripada tugas mendidik pelajar, guru-guru juga perlu berdepan dengan pelbagai karenah disiplin pelajar yang menambahkan lagi bebanan kerja guru. Kajian ini merangkumi kajian berkenaan tahap produktiviti dalam kalangan guru diperingkat sekolah menengah di sekitar bandar utama seperti Kota Kinabalu, Sandakan dan Tawau. Di samping itu, kajian ini juga melihat kedudukan faktor demografi, faktor persekitaran serta faktor sistem dan prosedur yang mempengaruhi produktiviti oleh guru khususnya para pendidikan di negeri Sabah.

Kata Kunci: Guru, produktiviti, demografi, persekitaran, sistem dan prosedur, Sabah.

TARIFF ON IMPORT OF PLASTIC WASTE

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Abstract

Tariff on imported plastic waste was imposed by Muhiyiddin's Perikatan National – Barisan National administration on 1 June 2021. This policy brief asked the following questions; (i) who will benefit and who will lose from this tariff? (ii) will the benefits outweigh the costs? (iii) Is it a good trade policy?

Keywords: Tariff, imported high quality plastic wastes, cost-benefit analysis, social cost

Introduction

In October 2018, the previous PM Mahathir led Pakatan Harapan government suggested a levy rate of USD3.65 per m.t. to be imposed on plastic wastes. It was not implemented until 1 June 2021 due to political coup d'état known as Sheraton Move and subsequent political crisis during Perikatan-Barisan National government in which PM Muhiyiddin was toppled down by Ismail Sabri. A Specific Tariff of MYR20 per metric tonnes was imposed on plastic waste classified under HS3915 which includes "waste, parings and scrap, of plastic specifically 391510- Polymers of ethylene/3915-20 =polymers of styrene/3915-90= of other plastics". The rationale behind this trade policy is " to improve the management of plastic pollution resulting recycling industry".

Objectives of this policy brief

To answer the following questions: (i) who will benefit and who will lose from this tariff? (ii) Will the benefits outweigh the costs? (iii) Is it a good trade policy? (iv) to what extent can it help to improve the management of plastic pollution resulting from recycling industry?

Malaysia trading partners in plastic wastes will be affected

The tariff will be affecting 19 trading partners i.e., countries that has substantial import and exports of plastic waste with Malaysia. Among mostly affected but not limited to, in alphabetical order; (1) Australia, (2) Belgium, (3) Canada, (4) China PRC, (5) Chinese Taipei, (6) France, (7) Germany, (8) Hong Kong, (9) Italy, (10) Japan, (11)

Netherlands, (12) Republic of Korea, (13) Saudi Arabia, (14) Singapore, (15) Slovenia, (16) Spain, (17) United Kingdom, (18) United States of America and (19) Yemen.

Five types of recyclable plastic wastes in Malaysia given cost and availability of technology

Five types of plastic wastes that are being recycled in Malaysia given the availability of technology and costs are as follows.

- (i) Polyethylene Terephthalate (PET or PETE) such as beverages bottles (minerals water, food trays, medicine bottles, clothing and carpet fibre etc.). All can be recycled into a cheaper material to make fabric, shoes, upholstery, fibrefill etc.
- (ii) High- density polyethylene (HDPE) as bottle or container for non-carbonated drinks, toys, bucket, motor oil, shampoo, detergent etc. It not safe to reused to store drink or food.
- (iii) Cling –film, bubble wrap, sandwich bags, squeezable bottles, plastic bags etc.
- (iv) Polystyrene (PS) such as disposable cups, plastic food boxes (tapau), eggs boxes, clear vegetable packaging, plastic cutlery, packing foam etc.
- (v) Polypropylene (PP) such as Tupperware -lunch boxes, margarine container, yogurt pots, etc. strong and can withstand high temperature.

Four types of recyclable plastic wastes or polymers but costly and technology not widely available in Malaysia

The other four types of plastic waste or polymers are very costly to recycle or its expensive technology are not widely available in Malaysia. In addition, their life cycle is very long and but can be re-use in a definite way and time.

- (i) Polycarbonate (PC) and Polylactide (PLA) such as baby bottles, CDs, medical storage containers.
- (ii) Polyurethane (PU) – furniture upholstery, cushioning material, insulation.
- (iii) Acrylonitrile butadiene styrene (ABS) – toys, phone covers, electrical equipment.
- (iv) Polyvinyl Chloride (PVC) –tube or pipes, credit cards, synthetic leather product etc. If PVC are exposed to intense heat its produced toxic hydrogen chloride fumes.

Government's moving target

The previous government set target for phasing out imported plastic wastes for recycling. The aim was that by the end of year 1 (2019) at least 30% of plastic wastes used in recycling in Malaysia must be sourced domestically. And followed by 40% and 50% in year 2 (2020) and year 3 respectively. It was found to be too ambitious. A study published in March 2021, concluded that 24% of key plastic were recycled PET, PP, LDPE, LLDPE and HDPE which are valued at USD1.1 billion per year far too small as compared to plastic manufacturing industry 4.7% or equivalent to USD7.23 billion of GDP in 2018. Only 13% plastic wastes were used either to generate energy or

dumped in sanitary landfills. According to the study, 1.07 million m.t plastic wastes were not recycled but discarded or illegally dumped. This beg a question- is the target of 40% by 2025 in recycling of plastic wastes set by the National Solid Waste Management Department realistic?

Malaysian Plastic Recyclers Association (MPRA) and Malaysian Plastic Manufacturers Association (MPMA) the captain of the industry think that "Recycling plays a vital role in protecting the environment as well as managing and disposing of waste".

Up until June 2019 sixty-six companies out of 84 members of the MPRA were holding Approved Permits (AP) allowing them to import and export plastic wastes (under Customs Act 1967). Importation of clean plastic scrap and processing of HS 3915 are regulated by the Solid Waste Management Department an agency under Federal Ministry of Housing and Local Government.

Plastic used in packaging -not recyclable (costly)

Malaysia's estimated annual Household Plastic Per Capita Used in Packaging were 16.7kg (in 2020). Small if compared to 76kg used by consumers in Singapore or 59kg in Australia. It is relatively small in quantity, yet it has caused many big problems. That same year, plastic used for packaging in Malaysia was 523,000 metric tons or half of total plastic usage. In packaging, plastic of different polymers or types are mixed, fused with other materials such as paper, bio-gradable, pigments (coloring) etc. A mixed of different types of plastics and materials (example- tinted PET) used to store beverages or other liquid and foods made them heterogenous therefore very expensive if not impossible to recycle. They are called Single Used Plastics (SUP) i.e., once used almost all of them would be dumped in landfills or thrown away therefore causing environment pollution and creating hazards to all living things.

The highest usage of plastic in Malaysia in 2020, in a descending order are (i) 190,000 m.t by "others" category such as electrical wiring and electronics goods (E&E), construction and automotives sectors; (ii) 148,000 m.t.in packing or packaging of Foods; (iii) 119,000 m.t. for Beverages and (iv) 67,000 m.t. for Detergent, cleaning agents and personal care. Category (i) are homogenous by polymer types therefore they are highly recyclable; they can be sorted out easily either manually (not that cheap if it is done by foreign labors) or mechanically (efficient if there is sufficient supply). Category (ii), (iii) and (iv) is most notoriously difficult to recycle because of contamination of food leftovers or liquid etc. To make it worst, majority of Malaysian are not willing to voluntarily separate their solid waste particularly plastic thrash.

Malaysia- Import and export of HS3915

Plastic industry reported a turnover amounted to MYR30.98 billion in 2018 including exports F.O.B of plastics valued at MYR14.60 billion. It increased to MY33.10 billion in 2019 including exports valued at MYR15.03. Plastic industry was severely affected

by lockdowns and other restrictions on movement of people during COVID-19 Pandemic, exports was then reduced to MYR13.3 billion due to weakened demand. The exact quantity and value of exported virgin plastic (denote vP) and exported recycled plastics (denote rP) by types of polymers and its country destination is not known.

In 2019, Malaysia (denote, Domestic) used 1.7 million tons, imported 3.1 million.t. of key resins (types of unknown) and exported 3.5 million.t. Malaysia was running a surplus in international trade of key resins. Large quantity of imports suggest Domestic demand for key resins was higher than its supply i.e., shortage. High quantity exported suggest certain types of polymers were exported to Foreign where it is highly demanded i.e., fetch higher prices. Furthermore, Malaysia has no Local Contents Requirements for r.P. In other words, key resins i.e., input have been allocated efficiently. Its follow the path of least resistance i.e., free trade was allowed by Foreign. The proportion of vP used to produce the exported key resins are not known. Also not known is whether all plastic wastes imported from foreign countries (denote, Foreign) were actually used in manufacturing rP for exports. Estimates (guess?) can be made as follows.

In 2018, members of MPRA imported 872,525 m.t. plastic waste (or scrap) the largest imports since 2007. Most of it were polymers HS3915 consisted of 650 m.t. of Ethylene, 210 m.t of Others (which type?), 30 m.t. of Styrene plus unspecified amount of Vinyl Chloride. The Country of Origin, in a descending order of quantity were (i) USA; (ii) Japan;(iii) UK; (iv) Germany; (v) Hong Kong and (vi) Australia.

Why international trade in HS3915 exist?

Two important things here; firstly, imported plastic wastes HS3915 are internationally traded commodity due to the existence of secondary markets within Domestic where each type of polymer is an input to produce yet another immediate or industrial material in a form of a plastic pellets, flakes or resins (depending on what kind of process involved – pyrolysis, etc.).

Plastic recyclers operating in Malaysia have been importing high quality plastic waste or rejects (and key resins) since 2007. Because in Domestic there was (and still is) insufficient supply of clean and uncontaminated homogenous (sorted by type of polymers etc.) recyclable plastic.

Recycled plastic as imperfect substitute to Virgin plastic

Petroleum price went up from USD40.76 in 2016 to USD69.78 per barrel in 2018, resulted in an increase in a cost of producing petroleum-based v.P. Most producers of v.P are also in plastic recycling was in urgent need for r.P as substitute (alas, not perfect). That business opportunity came knocking their doors after July 2017. China

banned importations of 25 types of solid wastes including plastics, papers, textiles etc. Huge volume of plastics wastes destined for China were piling up in Foreign (exporting countries). Thanks to free trade, it made its way to be recycled in Malaysia, Turkey, Indonesia and Vietnam. Before the ban, China was the world largest importer (buying up to 80% of plastic wastes mostly from rich developed countries like USA, UK, EU, Japan and Australia). With such sheer size of trade, China market dictates the world market and its prices. And so, of those four major destinations for recycling in 2018, Malaysia became the top importer as a response to a temporary increase in demand for r.P. Price for high quality plastic waste was high but the supply in Domestic was not very elastic (not sensitive to) to it.

Who benefit (gain) from Tariff?

From the viewpoint of General Equilibrium Framework, trade in HS3915 arises when there is a different in prices in those importing countries. Trade continue until price differential are eliminated- market reached equilibrium. It works this way; without trade the price of HS3915 sourced domestically from either Collected for Recycling (CFR) or Materials Recovery Facilities (MRF) would be much higher than it is in Foreign and vice versa. As long as the cost (hence, price) of producing high quality HS3915 are higher at Home (in Domestic) and it exceeds the price in Foreign, AP holders will continue to import them.

Malaysia is a small country (in terms of volumes or value of its import-export of HS3915), so a specific tariff it imposes cannot lower the world prices of HS3915 (in Foreign). Tariff is expected to increase the price at Home indirectly protecting recyclers who sourced their plastic wastes domestically (assume- zero mixing between imported plastic wastes and those generated by Domestic sectors). It is profitable for AP holders when price difference between the two markets is at least MYR20 per m.t.

How much protection this tariff actually provides is measured or reflected in price that would prevail under free trade. Simply divide the Specific tariff by the price Net of the tariff. When Home imposes tariff, it improves its Terms of Trade at Foreign's expense or one may say, tariff hurt the rest of the world. It effects on Home's welfare is not very clear. While improvement in terms of trade benefits Home, simultaneously imposes costs by distorting production and consumption incentives within Home economy.

Is it optimum i.e., maximizes Net Benefit in which terms of trade more than costs? Tariff change relative prices of goods and such changes have strong effects on income distribution because factor immobility in the factor intensity of different industries in plastic sector. To iterate, this tariff has direct effect -raising the price of imported good at Home and indirect effect on Malaysia- terms of trade.

A caveat: Terms of trade effects suggests a Metzler Paradox possibility, if tariff improve a country term of trade that much i.e., raise the relative price of its export good on world markets, that even after tariff are added, internal relative price of import good falls.

Tariff – costs and benefits analysis (CBA)?

To recapitulate; tariff increases price at Home but lowers the price of imported HS3915 (from Foreign) resulting in Domestic production of r.P rises (a shift in SS) while Domestic consumption (users of r.P) falls (a shift in DD). Or put simply, Home producers benefits (of high quality plastic wastes sourced from domestically generated plastic thrash) i.e. receiving a higher price hence gained higher Producer Surplus. Unless Metzler paradox occurred i.e., tariff lower the price received by Home producers. Whereas Home consumers pay a higher price, which makes them worse off. Tariff hurt consumers. Important to note that a reduction in Consumer Surplus referring to the difference between the price he actually paid and price he would be willing to pay for. Whatever it is, Home government gained by collecting Revenue (tax multiple with the weight of imported HS3915).

Concluding remarks

When a small country like Malaysia imposes a tariff, its share of the world market for HS3915 it imports are usually small to begin with. Its import reduction has negligible effect of the world price. Since gains and losses are unequally distributed so the overall CBA on the tariff depends on how much we value a Ringgit's worth of benefit to each group. In 2019 (before COVID-19 pandemic and during free trade) downstream plastic waste recycling industry comprises of 84 members of MRPA generated revenue of MYR 4.5 billion from exporting 70% of their production. Their total investment was reported MYR 2.8 billion. Companies big and small, all are active members of MPMA and MPRA together has been employing millions of employees along supply chain. Government may be able to collect MYR10,995,720 or MYR17,450,500. Tax revenue plus the increase in Producer Surplus (benefit) is still smaller than reduction in Consumer Surplus and opportunity costs i.e., losses in terms of Multiplier effects in income and employment created by recycling and plastic sectors.

Tariff is not going to be effective. It is a blunt instrument of trade policy. Tariff is not suitable way to improving the management of plastic pollution resulting from recycling industry. Recyclers who are importing plastic wastes did not cause plastic pollution to worsen (social cost). In fact, the opposite is true. Plastic is used in packaging solely for the convenient of the consumers who is also the biggest plastic polluters. Price of things that are packed and packaged in or made of plastic does not include its social costs. And so, consumers are getting away polluting with impunity. By imposing tariff, government is indirectly forcing recyclers to give priority to plastic wastes domestically generated as if they are less polluting than the imported HS3915.