

ID005 – Spirituality and Flood Victims Condition at Temporary Flood Transfer Center (TFTC): A Case Study of Unexpected First Wave Flood Event in 2017

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Abstract

Almost every year East Coast of Peninsular Malaysia experiences monsoon season which result in unexpected flood events especially in the state of Terengganu and Kelantan. The recurrent events require local authorities to open Temporary Flood Transfer Center (TFTC) to overcome the problem. Nonetheless, results from previous studies found that the low of quality of life in the flood transfer centers exists due to inadequate of food supply, no understanding between evacuees, the congestion of TFTC, and the unsuitable and insufficient equipment used. Besides that, the flood victims are also exposing to dangerous diseases cause by water pollution. Therefore by highlighting these scenarios, this pilot study aims to improve the quality of life (QoL) among flood victims by promoting spirituality into QoL model. Secondly, the focus of this study is to identify the role of flood victim's background condition as a Moderator Variables towards their QoL. Findings indicate that Spirituality do not associates directly toward QoL among Flood Victims at TFTC. Nevertheless, the result shows that spirituality still provided significant impact indirectly (partially mediation) as a Moderator Variable in this study. Thus, flood victim's background also plays significant impact to total variance in QoL. The selection of respondents based on first wave flood event occur from early November 2016 until January 2017.

Keywords: *quality of life; spirituality; temporary flood transfer center; flood victims; moderator variables*

1. INTRODUCTION AND ISSUES

Early November 2016, Malaysia Ministry of Science, Technology & Innovation started to warn Malaysian citizen regarding to incoming heavy raining session (Monsoon Season) during 3 to 5 days expected flood event at East Coast Country (MOSTI, 2016). At the end November 2016, 83 victims from 16 families from Kemasik, Kemaman has been the first group transfer to SMK Badrul Alam Shah and SK Telok Kalung. Heavy rains have caused increasing water level at a few main rivers at Kemaman Terengganu together with high tide phenomena contribute to worse condition (Astro Awani, 2016a). Meanwhile, in the early December 2016, another four Temporary Flood Transfer Center (TFTC) started to operate in order to manage 329 victims come from around Kuala Terengganu, Malaysia (Astro Awani, 2016b). Similar scenario happen at Pasir Puteh, Kelantan. The unexpected flood event requires three TFTC to operate in order to manage 57 victims come from 18 families (Astro Awani, 2017). Results of previous studies found that the low of quality of life (QoL) in the TFTC because of evacuation

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conflicts exist due to inadequate food, no understanding fellow evacuees and centers transfer congested with infrastructure and equipment that are not suitable and insufficient (Zulhafiz Mohd Said et al., 2013). Thus, flood victims are also exposing with deathly diseases due to E-coli and Coliform including Leptospirosis which delivered from water pollution (Astro Awani, 2016c). The results from previous studies also found that 4 main domains of QoL, namely, physical, psychological well-being (Mental Health), social networks or social support and environment play the roles toward level of QoL. The purpose of the pilot study is to improve the QoL among flood victims by promoting spirituality into QoL model. Secondly, the focus of this study to identify the role of flood victim's background condition towards their QoL at TFTC. The victim's backgrounds include the number of household living together, the number of the day stay at the TFTC and the type of center provided by authorities consider play significant effect towards level of QoL as well as their property damage and loss condition during flood event.

1.1 Research Question

The main inquiry in this study to examine the role of spirituality to set of variables (Physical Health, Mental Health, Social Support, and Environment) in order to enhance QoL score among flood victims in TFTC? Follow by exactly how the roles of victim's background condition giving the significant variance in QoL score?

1.2 Literature review

1.2.1 The relevance of QoL with flood victims

The disaster occurred regardless of whether the drought, earthquake or flood negative impact on the quality of human life. This is especially in the journey of human life, social networks, the environment, health, economy and etc. Previous studies show that research regarding to QoL more focusing on four major domains, namely physical health, psychological well-being (mental health), social networking or social support and the environment (Lin, Huang, Huang, Hwang, Tsai, and Chin, 2002; Fauci, Bonciani and Guerra, 2012; Papanikolaou, Adamis, and Kyriopoulos 2012 and Waelveerakup, 2014). The results of these studies highlight all four domains except Fauci et al. (2012) that divides the four-dimensional domain with respect to the three main life of Humanity such as Being, Belonging and Becoming.

1.2.2 Flood victims living condition at TFTC

During gathering information session, researchers have opportunity look through victim's conditions. The situation described was align with previous report done by Mohd Zulhafiz Said et al. (2013), about the TFTC not in favorable condition. Despite, the QoL of the flood victims not met. Mohd Zulhafiz and colleagues' state the main problem in the TFTC were inadequate food and food shortages, and following with TFTC too congested with flood victims. As well as with limited of infrastructure facilities because of not suitable or fulfill the victim needs. Normally, the hall and building of school, public hall, and mosque were selecting place for TFTC in this country. Most of infrastructure facilities at that place is not design for those scenario. Thus, the limited of the resources and facilities mention earlier plus together with stress, anxiety, and depression will affect the QoL of flood victims involved (Johari & Marzuki, 2013 and Abdullah et al., 2015).

1.3 The role of Moderator Variables

1.3.1 The spirituality and religious

Research done by William, et al. (1991), states that religious ritual have significant to reduced impact of anxiety, depression, and stressful life event. Meanwhile, in Islam, the implementing of spirituality and religious practice can help victims to cope with the stressful life especially for those involved with flood disaster (Mohd et al., 2015). By the way, it is line with study done by Sipon et al. (2016), highlighted that spirituality and social support service provided by third parties such as Government Agencies and NGOs should be more comprehensive to victims at TFTC. Sipon et al. (2016) also mention that spirituality elements come from higher levels of religious involvement provided greater well-being and mental health among victims. As a

result, Sipon et al. (2016) concluded that spirituality play important role to support flood victims to cope their psychological issues such as avoidance and emotional numbing. As a consequence of this condition, flood victims will able to active in their daily social activity like usually. As a stated earlier, this study assumes that Islamic teaching and practice able to maintain victims condition to moving forward in their life.

Besides that, the study done by Brown (2004) indicated the role of psychological factors or mental health have significant effect toward QoL. In addition, Brown (2004) also proposed in the future study to investigate the variables that act as moderator to measure the impact to QoL included cognitive mechanisms such as belief or spirituality elements. Hence, this study plan to investigate the role of spirituality to set of variables (Physical Health, Mental Health, Social Support, and Environment) in order to enhance QoL score among victims in TFTC.

1.3.2 Flood victims background condition

Referring studies involve with flood victims done by Abdullah et al. (2015) focusing on social support and stress among victims. Meanwhile, victim's background such as district, gender, race, age, occupation and incomes have significant effect to social support and level of stress among victims. In the study done by Mohd et al., (2015) about role of religious and spirituality toward flood well-being victim's condition found that victims background such as level of education and Islamic practices also have effect to well-being among victims. Furthermore, Zehadul et al. (2016) show that infrastructures and facilities according to types of TFTC and loss of properties and valuables also play important effect during flood event in December 2014. Consequently, in this study, number of household and the day victim family stay at TFTC, including with types of TFTC, level of property damage, and loss condition are expected to bring effect to QoL among flood victims in the TFTC.

1.4 Conceptual framework

Based on the previous studies and research objectives, researchers proposing the spirituality among flood victims has potential to play the roles as a moderator variable to enhance the QoL at TFTC together with the victim's background condition. Refer to figure 1: The Conceptual Framework Proposing QoL Model at TFTCs.

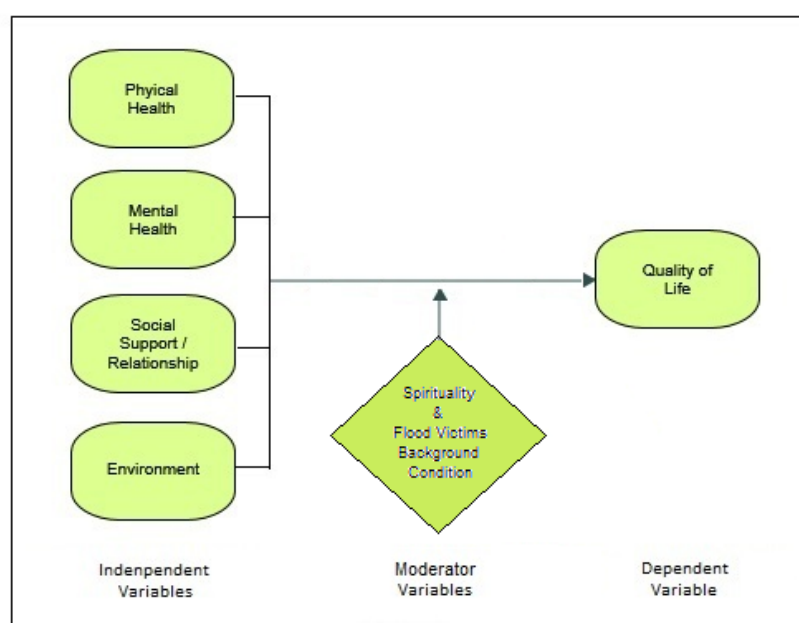


Figure 1: The Conceptual Framework Proposing QoL Model at TFTC

1.5 Hypothesis

Based on the above literatures, the following hypotheses are established:

- H1: The Spirituality have significant effects towards the relationship between a set of variables (Physical Health, Mental Health, Social Support, and Environment) to predict level of Quality of Life
- H2: The influence of Flood Victims Condition Background moderates the relationship between a set of variables (Physical Health, Mental Health, Social Support, and Environment) and level of Quality of Life
- H2a: The influence of types of TFTC occupies by victim moderates the relationship between a set of variables (Physical Health, Mental Health, Social Support, and Environment) and level of Quality of Life
- H2b: The influence of Number of Household at Flood Transfer Center moderates the relationship between a set of variables (Physical Health, Mental Health, Social Support, and Environment) and level of Quality of Life
- H2c: The influence of Temporary Stay Period – Daily at TFTC moderates the relationship between a set of variables (Physical Health, Mental Health, Social Support, and Environment) and level of Quality of Life
- H2d: The influence of Property Damage & Accidents during flood event moderates the relationship between a set of variables (Physical Health, Mental Health, Social Support, and Environment) and level of Quality of Life

2. METHOD AND MATERIAL

This study uses quantitative and qualitative approaches by collecting literature relating directly and indirectly with the QoL of flood victims (Mixed Methods Procedures - Concurrent Embedded Strategy). Data will analyses using IBM SPSS in order to run the several tests. Meanwhile, researchers also using Nvivo11 to managing the information for primary and secondary data. The primary data obtained from respondents and participants occupy TFTC by using Purposive Sampling Techniques. Furthermore, researcher also conducted semi – structured interview and focus group interview. The main reason to have those both instrument to support each other and to answer the research questions precisely. The selection of respondents based on first wave flood event occur from early November 2016 until January 2017. Terengganu respondents come from *Paka, Dungun, Merchang, Sungai Tong* and *Besut* districts. Meanwhile Kelantan only represented by respondents from *Pasir Puteh* districts. After several visiting TFTC, this research project able to capture a total number of 106 victims to participate in this pilot study.

In the analysis section, researchers using Hierarchical Multiple Regression Analysis to evaluate the effect moderator variables towards the relationship between IVs and DV. Lastly, researchers assessing R square values based on range value proposing by Chin (1998b). The R square value score between 0 to 0.19 is consider weak, next, more than 0.19 to 0.33 is consider moderate, and last is not least more than 0.67 is consider substantial.

2.1 Questionnaire

A set of questionnaire is develop and organized into eight section: Section A cover basic information of respondents. Follow by Section B requires the respondents to give respond on QoL consist with 5 questions. While Section C cover 5 questions regarding to physical health. In the Section D, consist with 5 questions on Mental Health aspects, while in the Section E, highlight the social support and consists of 6 questions. In the Section F, 6 questions are used to ask on environment in TFTC and the end of the part is Section G, consist 6 questions enquiring about Spirituality. Generally, the questionnaire are adapted from World Health Organization Quality of Life (WHOQOL - BREF) and modified based on this research purpose

(WHO, 1996). Meanwhile for Section G, 6 questions are adapted and modified based on Brief Religion Coping (BRCOPE) by Pargament (1997).

2.2 Semi – Structured interview and focus group interview

In this study, researchers also develop a set of semi – structured interview and group interview protocol based on research questions and objectives. The structure of responsive interview is consist of 4 main questions cover with all 4 bigger elements in QoL Model together with spirituality elements. The participant also has choice to give any comment regarding issues at TFTC at the end of section. All the interviews are recorded and audio transfer by using Nvivo11 to transcribe.

3. ANALYSIS AND RESULTS

3.1 Reliability and descriptive analysis (respondent's background)

The reliability test showed that Cronbach's Alpha for overall section is 0.776 and consider acceptable (Pallant, 2016). Table 1 below is summary information about respondent's background. Of the total 106 respondents, lead by female at 69%. Most of them married and the profile of participating respondents in terms of level of education suggest that most of victims have lower level of education. During that flood event, 58% victims transfer to School based facilities and stay over there more than 2 days. For further illustration of the distribution recorded that the composition number of household stay together at TFTC between 3 to 5 follow by those who have 6 to 10 number of family members. Meanwhile, 43% of them composition age between 41 to 60 and 58% of victims under loss or damage property categories. From total number of respondents, 72% representing the state of Terengganu and Kelantan at making up 28% (Kelantan only represented by *Pasir Puteh*).

Table 1: Respondent's Background

	Percentage		Percentage
Gender		Types of TFTC	
Male	31.1	School based facilities	57.5
Female	68.9	Special based center	42.5
Level of Education		Marital Status	
Lower	57.5	Single	5.70
Higher	42.5	Married	84.0
		Others	10.4
No. of Household		Temporary Stay Period - Daily	
Below 2	15.1	1 day	28.3
3 to 5	48.1	2 days	39.6
6 to 10	34.0	More than 3 days	32.1
Above 10	2.8		
Age		Property Damage & Accidents (Loss / Lost Soul)	
Below 20	0.9	Loss / Lost	57.5
21 to 40	38.7	None	42.5
41 to 60	43.4		
61 and above	17.0		

3.2 Hierarchical Multiple Regression Analysis

Table 2: Hierarchical Multiple Regression – Spirituality with QoL Mean Score

Model	R Square	R Square Change	Beta
1	31%	31%	Mental Health = 0.318, p<0.006
2	34%	2.3%	Mental Health = 0.336, p<0.003, Environment = 0.210, p<0.039
Model 1: Quality of Life = Physical + Mental Health + Social Support + Environment			
Model 2: Quality of Life = Physical + Mental Health + Social Support + Environment + Spirituality			

Further more, analysis using Hierarchical Multiple Regression (refer to Table 2) show that spirituality play role as a moderator variables (Step 1, 31% = Model 1 and after Step 2 the total variance was 34%, $F(4,101) = 11.58$, $p < .000$, $R^2 \text{ change} = 0.31$, $F(5,100) = 10.19$, $p < 0.001$ = Model 2). In the final model (Model 2) only two predictor variables (Mental Health

[beta=0.336 p<0.003], and Environment [beta=0.210 p<0.039]) were statistically significant, whereas in Model 1 only one predictor variable measures were statistically significant with Mental Health recording a higher beta value (beta=0.318 p<0.006). Referring to Chin (1998b), a new R squared change value for this analysis consider is moderate (more than 0.33).

Table 3: Hierarchical Multiple Regression – All Moderator Variables

Model	R Square	R Square Change	Beta
1	34%	3.4%	Mental Health = 0.336, p<0.003, Environment = 0.210, p<0.0039
2	35%	1.0%	Mental Health = 0.334, p<0.003, Physical Health = 0.208, p<0.033
3	37%	2.0%	Mental Health = 0.315, p<0.005, Physical Health = 0.226, p<0.021
4	38%	1.0%	Mental Health = 0.308, p<0.006, Physical Health = 0.220, p<0.024
5	38%	0.02%	Mental Health = 0.304, p<0.007, Physical Health = 0.227, p<0.021
Model 1: Quality of Life = Physical + Mental Health + Social Support + Environment + Spirituality			
Model 2: Quality of Life = Physical + Mental Health + Social Support + Environment + Spirituality + Types of TFTC			
Model 3: Quality of Life = Physical + Mental Health + Social Support + Environment + Spirituality + Types of TFTC + Temporary Stay Period			
Model 4: Quality of Life = Physical + Mental Health + Social Support + Environment + Spirituality + Types of TFTC + Temporary Stay Period + Property Damage & Loss / Lost			
Model 5: Quality of Life = Physical + Mental Health + Social Support + Environment + Spirituality + Types of TFTC + Temporary Stay Period + Property Damage & Loss / Lost + No. of Household			

The overall analysis using Hierarchical Multiple Regression show that all moderators (Types of TFTC + Temporary Stay Period + Property Damage & Loss + No. of Household) show that significant improve QoL mean score among Flood Victims at TFTC. The results reveal that the increasing variances score from Model 1 to Model 5 (34% to 38%) (Refer to Table 3). Based on the results show that in Table 2 and 3, this finding support hypothesis H1 and H2. The new R squared change value for those model consider is moderate (more than 0.33) based on Chin (1998b) R squared values assessment.

Table 4: Hierarchical Multiple Regression – Moderator Variables – Types of TFTC with QoL Mean Score

Model	R Square	Beta
1	34%	Mental Health = 0.336, p<0.003, Environment = 0.210, p<0.039
2	27%	Mental Health = 0.338, p<0.033, Spirituality= -0.292, p<0.025
3	61%	Mental Health = 0.341, p<0.023
Model 1: Quality of Life = Physical + Mental Health + Social Support + Environment + Spirituality		
Model 2: Quality of Life = Physical + Mental Health + Social Support + Environment + Spirituality + School based facilities		
Model 3: Quality of Life = Physical + Mental Health + Social Support + Environment + Spirituality + Special based center		

While, results (see Table 4) from second test involve with Types of TFTC as a Moderator show that significant improve quality of life mean score especially under Special Based Center (*Balai Raya*, & *Dewan Sivik* – Public Hall special alteration for Flood Event). The total variance was 61%, F change (5,155) =4.08, p<0.030 (Model 3). Only one control variable measures were statistically significant with Mental Health recording a higher beta value (beta=0.341 p<0.023). Whereas School Based Facilities show that lower total variance was 27%, F change (5, 55) = 4.08, p<0.03 (Model 2) compare with previous Model 1= 34%. Even though, two control variable measures are statistically significant with Mental Health recording a higher beta value (beta=0.338 p<0.033) and Spirituality recording a second higher beta value (beta=-0.292, p<0.025). Referring to Chin (1998b), a new R squared change value for this analysis consider is moderate (more than 0.33). Regarding to finding, hypothesis H2a was supported.

Next, third analysis (refer to Table 5) involves with the Temporary Stay Period as a Moderator show that significant improve QoL mean score. The mean score started to decrease for second days and following days. Model 1, 34%, F change (5,100) =10.20, p<0.000, Model 2 (Stay in 1 day), the total variance was 52%, F change (5, 24) =5.21, p<0.002. Only one control variable measures is statistically significant with Physical Health recording a higher beta value (beta=0.503 p<0.003). Furthermore, Model 3 (Stay in 2 days) the total variance was 41%, F change (5, 36) =5.04, p<0.001. Similar result with Model 2, only one control variable measures were statistically significant with Mental Health recording a higher beta value (beta=0.510,

$p < 0.016$). Meanwhile, Model 4 (Stay more than 3 days) show that total variance was 35%, F change (5, 28) = 3.07, $p < 0.025$. Based on proposed H2c provide an evidence that number of day stay among victims show there are significant influences score of QoL especially for those stay more than 2 days (score variance of QoL reduce from 52% to 35% for those stay more than 3 days). Referring to Chin (1998b), a new R squared change value for this analysis consider is moderate (more than 0.33)

Table 5: Hierarchical Multiple Regression – Moderator Variables – Temporary Stay Period with QoL Mean Score

Model	R Square	Beta
1	34%	Mental Health = 0.336, $p < 0.003$, Environment = 0.210, $p < 0.039$
2	52%	Physical Health = 0.503, $p < 0.003$
3	41%	Mental Health = 0.510, $p < 0.016$
4	35%	Nil.
Model 1: Quality of Life = Physical + Mental Health + Social Support + Environment + Spirituality		
Model 2: Quality of Life = Physical + Mental Health + Social Support + Environment + Spirituality + Temporary Stay Period (1 Day)		
Model 3: Quality of Life = Physical + Mental Health + Social Support + Environment + Spirituality + Temporary Stay Period (2 Days)		
Model 4: Quality of Life = Physical + Mental Health + Social Support + Environment + Spirituality + Temporary Stay Period (More than 3 Days)		

Table 6: Hierarchical Multiple Regression – Moderator Variables – Property Damage & Loss / Lost with Quality of Life Mean Score

Model	R Square	Beta
1	34%	Mental Health = 0.336, $p < 0.003$, Environment = 0.210, $p < 0.039$
2	35%	Environment = 0.373, $p < 0.013$
3	39%	Mental Health = 0.602, $p < 0.000$
Model 1: Quality of Life = Physical + Mental Health + Social Support + Environment + Spirituality		
Model 2: Quality of Life = Physical + Mental Health + Social Support + Environment + Spirituality + Property Damage & Loss / Lost		
Model 3: Quality of Life = Physical + Mental Health + Social Support + Environment + Spirituality + None		

The following test (see Table 6) show that Property Damage & Loss as a Moderator variable has significant improve QoL mean score under for those who 'loss or damage' their property and slightly different (increasing) for those who 'none'. Model 1, 34%, F change (5, 100) = 10.20, $p < 0.000$, Model 2 (Loss), the total variance was 35%, F change (5, 55) = 5.82, $p < 0.001$. Only one control variable measures is statistically significant with Environment recording a higher beta value (beta = 0.373, $p < 0.013$). Lastly in Model 3 (None), total variance was 39%, F change (5, 55) = 5.83, $p < 0.000$, slightly high compare to Model 1 only 34%. As a result, just one control variable measures were statistically significant with Mental Health recording a higher beta value (beta = 0.602, $p < 0.000$). Referring to Chin (1998b), a new R squared change value for this section consider is moderate (more than 0.33). Thus on these category, part of the hypothesis H2d is supported.

Table 7: Hierarchical Multiple Regression – Moderator Variables – No. of Household with QoL Mean Score

Model	R Square	Beta
1	34%	Mental Health = 0.336, $p < 0.003$, Environment = 0.210, $p < 0.039$
2	78%	Mental Health = 0.873, $p < 0.002$
3	40%	Environment = 0.346, $p < 0.018$
4	34%	Nil.
Model 1: Quality of Life = Physical + Mental Health + Social Support + Environment + Spirituality		
Model 2: Quality of Life = Physical + Mental Health + Social Support + Environment + Spirituality + No. of Household (Below 2)		
Model 3: Quality of Life = Physical + Mental Health + Social Support + Environment + Spirituality + No. of Household (3 to 5)		
Model 4: Quality of Life = Physical + Mental Health + Social Support + Environment + Spirituality + No. of Household (6 & Above)		

The mean score for QoL started to decrease according to number of household living together at TFTC. The total variance previous Model is 34% and tremendously increasing to 78% for Model 2 (Number of household - Below 2), F change (5, 87) = 5.73, $p < 0.015$. Only one control

variable measures is statistically significant with Mental Health recording a higher beta value ($\beta=0.873$, $p<0.002$). Referring to Chin (1998b), a new R squared change value for this Model 2 consider is substantial (more than 0.67). Next, R Square Model 3 (Number of household - 3 to 5) reduce 38% to 40%, F change (5, 47) =6.33, $p<0.000$. The analysis indicates that only Environment variable has higher reading beta value ($\beta=0.346$ $p<0.018$). Lastly, the total variances Model 4 (Number of household – More than 6) is 34%, F change (5, 33) =3.33, $p<0.015$. Based on proposed H2b provide an evidence that number of household stay with victims show there are significant influences score of QoL especially for those have number of family members more than 2 (score variance of QoL decreasing from 78% to 34% for those have more than 3 number of family members). Referring to Chin (1998b), a new R squared change value for Model 3 and Model 4 consider is moderate (more than 0.33)

Thus, in summary, all the hypothesis suggested in this study (H1 and H2 (H2a, H2b, H2c, and H2d) are accepted and successful to be proven.

4. DISCUSSION AND RECOMMENDATIONS

The findings of this research indicate that Spirituality is not associate directly toward QoL among Flood Victims at TFTC compare to Physical Health, Mental Health, Social Support, and Environment. However, the result show that spirituality still provided significant impact indirectly as a Mediator Variable in this study. In the results show that the Spirituality explains 2.1% of the variance in QoL. The total variance is slightly increasing from 31% to 34% as a whole. In that case, two control measures explained additional 34% of the variance in QoL is Mental Health and Environment (see Table 5.5.1). According to the average score in mental health dimension showed that most of them accepted the fact of life at the TFTC and satisfy with the life condition at there. According to interview with victim;

"Redha la... tiap - tiap tahun jadi lagu ni sokmo.... Setakat ni alhamdulillah.. semua disediakan... selesa dan tiada beza (We accepted this situation in our life because it's happen to us every years,... So far, thank god for support, and everything provided. Taking about life condition here (PPS) nothing change compare to home)"

Flood victim from Setiu, Terengganu

Mostly, 63% of the victim able to stay focus in managing their life and feeling happy to be at TFTC. At the end, more that 67% of them declare not having any problems or mind disturbance to be there. Based on the environment dimension, more than 91% of them feeling safe to be at TFTC. Despite of that, 77% feel comfortable, and satisfied with resources provided at TFTC. Regarding to information services provided by authorities, more than 60% satisfied with the current information about flood condition provided to authorities. However, because of flood event occur in the short duration (within 2 or 3 days), no activities provided to victims at TFTC compared to devastating floods in December 2014. Concerning about spirituality, most of the victims accepted and do not blame the fate for what happen to them. The victims also believe the event happen is a part of test in the life and have confidence there is wisdom behind it. Besides that, they do not have any problem to carry out their responsibilities as a Muslim at TFTC. Nonetheless, during this study not all TFTC provided any structure spirituality activities or organize by responsible authority. Based on interview with volunteers;

"Takde -takde... dia macam Terengganu la..dia punya mindset bulan 12 banjir.. dia dah dalam keadaan bersedia... dia gitu je.. cuma.. timbul - timbul kata dari segi takdir tu... kadang - kadang bila berlaku ramai ni sakni rasa tidak puashati sikit tu biasa.. kalau anak ramai.. dia rasa tertekan... kebetulan kita terlepas pandang sikit... itu mungkin ada sikit perasaan gitu.. kalau nok kata dari segi takdir..takdok... (No, never, in here (Terengganu) most of them (victim) already know and alert at the end of year (November – December), they going to facing with this situation (flood event), some of them may feel unaccepted with unequal services provided because of crowded but to blame this situation because of fate... No...Never)"

Volunteers from Merchang, Terengganu

As expected, Types of TFTC (School Facilities Center & Special Based Center), Temporary Stay Period (1 day, 2 days & More than 3 days) at TFTC, Property Damage & Loss / Lost (Loss or None) and Number of Household (Below 2, 3 to 5, and 6 and Above) play significant effect to total variance QoL score as Moderator Variables. The findings of research proving that victims who transferred at special based center such as *Balai Raya*, and *Dewan Sivik* (Public Hall special alteration for flood event) more comfortable compare to those who stay at school facilities center, despite of that, t-test mean score result showed that no significant difference in QoL score among them. Refer to the interviews section;

"Balai Raya..kalau dari segi pandangan saya memang sesuai la.. sebab selesa dan bebas dari gangguan.. lepas tu dia pun apa ni... kalau hujan pun orang kata insyaallah tak sampai (kena).. lepas tu dia tertutup.. tak kena piah (hujan) ke gapo dok..(Public Hall, based my point of view is suitable (comfortable, safe, and wide refer to size), fully cover from rainy season)"

JKM Officer from Pasir Puteh No. 1, Kelantan

"Dewan (sekolah) dia jadi kurang la... (kemudahan bilik air) toilet tu ada satu dua je... Dewan sekolah bukan pusat pemindahan ken.. bukan pusat pemindahan...Tapi gezet sebagai pusat pemindahan dan kecemasan... (School Hall, have lack of facilities such as toilet is very limited and school hall is not design for TFTC but it was reserved for shelter for emergency event)"

JKM Officer from Pasir Puteh No. 2, Kelantan

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ID043 - Determinants of Online Shopping Satisfaction among Civil Servants in Johor Bahru

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Abstract

Online shopping can be defined as the process whereby consumers directly buy goods or services from a seller in real-time, without using intermediaries, over the Internet. It is a form of electronic commerce. The sale or purchase transaction is completed electronically and interactively in real-time such as buying books at lelong.com. The purpose of this research is to identify the determinants among employees' in online shopping satisfaction at Majlis Perbandaran Johor Bahru Tengah. The factors identified in this article are webpage design, price, product quality, and security, meanwhile the outcome that is the online shopping satisfaction towards employees'. This research have three objective and the major objective is to find the most critical factor that can contribute the effect of employee in online shopping satisfaction at Majlis Perbandaran Johor Bahru Tengah. This research was done by conducting a survey and the questionnaires were distributed to the all employee at Majlis Perbandaran Johor Bahru Tengah. It involves all employees who are working at Majlis Perbandaran Johor Bahru Tengah which come from eleven (11) departments which are Finance, Building, Environmental and Health, License, Engineering, Valuation and Assets, Legal, Town Planning, Landscape, Management and Enforcement. The total number of population from the eleven (11) departments is 748 employees, hence 255 employees were chosen as the sample. The data were analysed using reliability analysis, frequency analysis, descriptive analysis, correlation analysis and multiple regression analysis. The results of the analysis show that the variables (webpage design, price, product quality, and security) have influence in online shopping satisfaction at Majlis Perbandaran Johor Bahru Tengah.

Keywords: consumer satisfaction; online shopping, civil servants, webpage design, transaction security

1. INTRODUCTION

The popularity of e-commerce or also known as "online shopping" is growing rapidly globally the world today. In this study, the authors are interested to determine the factors that affect online customer's purchasing satisfaction. Nagra & Gopal (2013) define on-line shopping as a channel where products or services are offered to potential consumers using the Internet as a medium of business transaction. Since 2005, statistic shows that there is an increase of Internet customers in Malaysia. In 2017, there are approximately 31,164,177 individuals in Malaysia and 78.8% (24,554,255) of them are Internet users (Internet World Stats, 2017).

The increasing number of individuals who uses the internet around the world has created an effective and efficient way in shopping environment. It enables online shoppers to make retail transactions anytime and anywhere. It encourages the explosive growth of e-commerce and

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transforms the consumers into information seekers and knowledgeable customers. Online shopping however, is perceived to be risky and information security plays a pivotal role in determining shopper's satisfaction. There are also other elements that include price, unsecured transaction in payment and delivery, and lack of quality information of products that decreases online consumers' satisfaction. The difference between online stores and physical stores is online stores provide online shoppers with rich information about product and services.

In online shopping, many customers are searching for the most affordable price. Online shoppers tend to choose the best price by comparing different online shopping website or online seller at the same time (Katawetawaraks & Cheng, 2013). One of the negative aspects of online shopping is that online seller did not highlight the true price of products sold in the website. In addition, online sellers also charges high shipping costs and instantly increase the price of goods and services. Other than price comparison, the variety of the products also influence online shopper satisfaction to shop online. This strategy help keep online shoppers stay loyal with online stores apart from trust and risk during the online shopping satisfaction.

Technology sophistication make web users worried and unsecure about identity and privacy information theft especially in transaction security and the guarantee of the product delivery when they shop online. Transaction securities in payment are very challenging to online sellers because it related to impression of lack of online shoppers' privacy and security personal information (Kim & Lennon, 2013). As a result, there are many internet users choose not to shop online and preferably traditional stores than online stores (Keisidou, Sarigiannidis, & Maditinos, 2011). This scenario is also due to the fraud or scam that are growing rapidly and make customers more careful when they shop online. Certainly, if the customer deceived by the fraud or scam online seller, they will lose their money and the most worried by customer is a loss of customers' privacy and security such as identity theft of credit cards (Lee, Cho, Chae, & Shim, 2010).

Slow or late shipping, inaccurate product delivery, product delivered not as in stated in the online shopping website is considered an unsecured transaction in delivery (J. Kim & Lennon, 2013). Slow or late delivery will make the customer feel awaited and will consider the online seller do not keep their promises in delivery the product in right time. In future, online seller will lose its customer because the online shoppers move to other online seller. Wrong product delivery and product delivered different from online shopping website will make customers feel deceived and unsatisfied as the product is expected is different from the website description (Guo, Ling, & Liu, 2012).

1.1 Review of the literature

In the world of retailing, e-commerce is a tool for reducing administrative cost and time, improve relationships for both business parties and customers. In general, there are two types of e-commerce can be understood that are B2B (business-to-business) and B2C (business-to-online shopper). In the B2C e-commerce context, it focuses on online sellers-online shopper relationships online shopping is a form of e-commerce whereby online shoppers directly buy goods or services form a seller over the internet.

There has been a marked increase in the number of online shoppers who purchase over the Internet, as well as an increase in sales worldwide conducted via electronic commerce. To create an online relationship quality between online sellers and online shoppers, a well-designed, rich product information and highly usable website become equivalent of competent online sellers. The advantages of E-commerce allow online shoppers to choose online shopping as alternative because of lower transaction, and as medium to buy faster and to order and purchase products with lowest comparative price.

Online shopping satisfaction.

Presently, online shopping is important trending activities on the internet. When an individual have an intention to purchase a product online, they have a choice to buy or not to buy the product. Shopping satisfaction is a critical vantage point for online shoppers as well for online sellers. Shoppers purchasing choice becomes one of crucial issues for retailers because online shopper are very difficult to understand. Interactive features, product diversity, rich product information, and security risk influence shoppers search for product information and finally make a purchase satisfactions. When online shopper satisfaction in needs and wants in shopping choice fulfilled, it is positively embrace the online sellers' brand.

Online shopping satisfaction is an action where customers browse and purchasing from one or more online sellers with intention to purchase appropriate product to fulfilled their need and wants via Internet. Similarly, according to Katawetawaraks & Cheng (2013), shopping satisfaction start with awareness, then information search, alternative evaluations, finally decide to purchase or not. Shopping satisfaction is categorized as an individual's arrangement and ability to purchase a particular product or item (Baubonienė & Gulevičiūtė, 2015). There are many prior research has used some factors that lead to the determinants of the online shopper online shopping satisfaction.

Website design

Webpage design has a direct effect on customer's satisfaction towards online shopping. They found that it is the second most contributing determinants underscored by most online shopper. There was similarly a positive relationship amongst webpage and internet shopping's satisfaction (Ganguly, Dash, Cyr, & Head, 2010). According to Kim & Lennon (2013), a good webpage of online shopping website influence customers such as potential buyer to visit and surf the website. This is because an attractive webpage design such as colour, layout, and graphic design as well can influence the emotional of customers and behavioural reactions. In addition, the online shopping website that have a variety of product range plus the availability of rich product information creates the first impression of the customers that the retailers or online seller have a good quality image or brand also represent the good name of the company.

Price

Price is vital in determining the online shopping satisfaction. (Lo, Chou, & Teng, 2013) analyse the phenomenon in which the online shopper expects the prices of products and services on the Internet to be lower than in traditional stores. Nowadays, online shoppers have a consciousness when they shop online. According to Park & Gretzel, 2010, price-sensitive online shoppers are very attracted to offers that show attractive prices and discounts. As result, price-sensitive online shoppers are not only focused on find the best price for their money, thus they also likely know their ability to distinguish the best product features depend on the price offer by the online sellers (Lo, et al., 2014). It also indicates that well-known brand with rich product information with lower price will tempting more online shoppers in online shopping website and they end up being more moderate and delicate with products.

Empirical results have shown that online shoppers expect the similar prices in all online shops but do not compare prices in online and traditional stores. It also convinces online shopper that online stores offer lower price than the traditional stores (Katawetawaraks & Cheng, 2013). Furthermore, there are many online sellers that sell the same product online but sell at different price. Some of the seller or online sellers sell the same products and services at cheaper price and some of them sell at expensive price than the original price. It can be assumed that another important determinant of shopping online satisfaction is the similarity prices in online shops. By using this way, online shoppers especially for who is a price-sensitive online shoppers can look for the best price and discount, get the right product information and at the same time give an impulse to online shoppers more time to spent explore and proficiently use the online shopping website.

Product Quality

Quality is described as intrinsic property of a product and the expected standard of product or service excellence. Quality of the product plays an important role of determinants for online shopper in online shopping satisfaction (Zhu & Zhang, 2010).

Product quality nowadays seems and usually to be comparable across vendor where online shoppers today know and concern about it before final purchase of the product. Quality of the product is the first impression for the some online shoppers when shop online. Although online shopping cannot enable online shoppers to touch or feel directly the quality of the product, but comment and review after purchased on the website can indicate the quality of the product to some extent. In addition, in terms of satisfaction and worth of buying, most of the potential customer will interpreting price and tend to go for higher price products as an indication of quality when they do not have enough product quality information. Customers are also concern the authenticity of the product in online stores even though the retailers claim it as original and genuine.

As results, the abbreviation word of 'monetary sacrifice' occurs when the price of the product did not match with the information of product attributes especially in the quality of the product (Kim, Xu, & Gupta, 2012), the negative impact of "monetary sacrifice" will make online shoppers dissatisfaction. Enhancing the product and service quality will encourage the positive impact that significantly increase the online shopper satisfaction. So, retailers should focuses especially on product quality such as genuine or low grade in order to make sure customer do not feel lured with the quality of the as promised by retailers after purchased. Therefore, by fulfilling customers demand for satisfaction in online shopping, online seller or retailers can continuously maintain loyalty of the existing customers and attract more potential customer in future.

Security

Security is one of the important determinants in online shopping satisfaction. There are many alternatives of payment method that can be use by online shoppers in shopping online. The common payment method use likely and widely is credit card. Presently, online shoppers are focuses and pay attention more to security issue and tend to buy product and services from the brand they trust and familiar with. Most of the online shopper concern about their misuse of their private personal information and transaction security that can be found in credit card. Most of the online sellers website today embedding the trust, for example, underlines that the e-online sellers employs privacy policies that handle online shopper's private data in a confidential and secure way (Özpolat, et al., 2013). In comparison, the "VeriSign" logo ensures that websites use safe payment methods by using digital certificates and Secure Sockets Layer (SSL) connection (Özpolat, et al., 2013). In other words, online shopper confident is high when seller or online sellers website have strong security (Özpolat, et al., 2013). Therefore, the influence of strong security attributed to the increase the degree of online shoppers' satisfaction and determinants in online shopping satisfaction.

2. METHODS AND MATERIAL

In this section, the authors will be discussing the conceptual framework, sampling technique and results of the data analysis. The conceptual framework is shown in figure 1, on the next page. The authors will be discussing of the methods and material of the research in the remaining sections.

2.1 Conceptual Framework

The proposed theoretical framework below consists of one dependent variable which is the variable of primary interest to researcher and the independent variables are the determinants or factors that are postulated to significantly influence the dependent variable. In this paper,

the satisfaction level of civil servant who purchases products online is chosen as the dependent variable. The independent variables identified in this article are webpage design, price, product quality, and security. Using the conceptual framework as the foundation of this article, we hope to determine the direction and strength of the variables. Furthermore, the researchers hope to determine which independent variable is the most dominant variable in influencing the changes in the dependent variable.

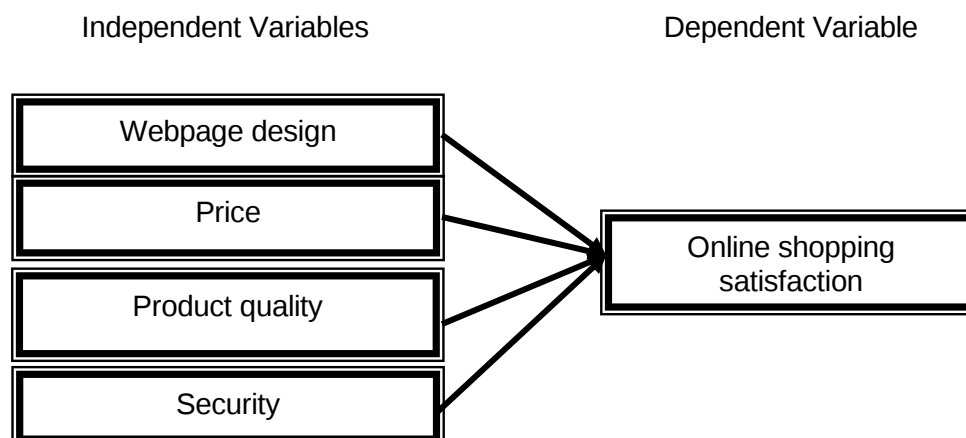


Figure 1: Theoretical framework

2.2 Sampling Methods

In this study, the researchers use primary data in the data collection process and it was analyzed using the SPSS software. The population for this study is employees' at Majlis Perbandaran Johor Bahru Tengah. The population identified in this study equals to 748 employees. There are 11 departments at *Majlis Perbandaran Johor Bahru Tengah* and hence, the total sample size is 255 employees (Roscoe, 1970). In addition, the researchers choose a stratified quota sampling technique, which is a probability sampling method. This sampling method is selected because the total number of employees for each of the 11 departments are not equal. Even though the identified ample equals to 255, a total of 260 questionnaires were distributed to employees in all the departments at the Municipality Council of Johor Bahru Tengah. This approach is adopted in order to take into consideration respondents that did not completed the questionnaires. As a result, the employees were divided according the respective departments and a sample of respondents were chosen from the respective population size of each departments. They were asked to provide their opinion and perspectives on the effect of the determinants on their online shopping satisfaction.

3. ANALYSIS AND RESULTS

The researcher had distributed 255 questionnaires to respondents at 11 departments of Majlis Perbandaran Johor Bahru Tengah. After the questionnaires have been collected the reliability analysis was conducted the internal validity of the items in the questionnaire. The Reliability coefficient suggested that the items has a strong internal validity and statistically fit to be used in the survey. The results collected were shown in table 1 below.

Table 1: Cronbach's Alpha of Items in the Questionnaire

Variables	No. of Items	Cronbach's Alpha
Online Shopping Satisfaction	5	0.764
Webpage Design	5	0.850
Price	5	0.717
Product Quality	5	0.752
Security	5	0.704

3.1 Correlation

Table 2 below shows the results of the Pearson Correlation analysis. All the independent variables, webpage design, price, product quality and security are found to have a significant and positive relationship with online shopping satisfaction. Hence, all the independent variables and dependent variables with moderate to strong association. The value is recorded as $r = 0.655, 0.617, 0.826$ and 0.506 respect. Figures in Table 2 highlighted these findings.

Table 2: Correlation analysis of the dependent and independent variables

Variables	Online Satisfaction	Webpage Design	Price	Product Quality
Webpage Design	0.655**			
Price	0.617**	0.648**		
Product Quality	0.826**	0.663**	0.697**	
Security	0.506**	0.505**	0.542**	0.577**

3.2 Regression Analysis

The Regression analysis was utilized to determine the influence of four variables that include website design, price, product quality and security towards online shopping satisfaction. In the regression analysis the R-Square value indicates the proportion of variance in the dependent variable (online shopping satisfaction) which can be predicted from the independent variables (webpage design, price, product quality and security). This R square value indicates that 70.4% of the variance in online shopping satisfaction can be predicted from the determinant variables of online shopping satisfaction. The remaining 29.6% of the Regression model is explained by other variables as shown in Table 3

Table 3: Regression Analysis of the Dependent Variable Online Satisfaction

Model Summary			Anova	
R	R-Square	Mean Squares	F	Sig.
0.839	0.704	9.371	148.319	0.000 ^b

Predictors (constant), Security, Webpage Design, Price, Product Quality

The result of coefficients analysis of multiple regressions demonstrated that only good webpage design and product quality were significant in influencing the changes in the civil servant online shopping satisfaction. Furthermore, the most dominant predictor is product quality with a Beta value (Standardized Coefficient) of 0.692 and webpage design is the second most dominant with a Beta value of 0.186. All results are shown in table 4.

Table 4: Coefficients Analysis for the Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	Collinearity Statistics	
	B	Std. Error	Beta	t		Tolerance	VIF
(Constant)	.620	.173		3.581	.000		
Webpage Design	.175	.047	0.186	3.758	.000	.485	2.062
Price	.009	.047	0.010	.188	.851	.437	2.290
Product Quality	.625	.049	0.692	12.82	.000	.407	2.458
Security	.009	.051	0.008	.174	.862	.619	1.616

Dependent Variable: Online Shopping Satisfaction

4. DISCUSSION

Based on the correlation analysis the researchers conclude that, there is a positive and strong relationship between webpage design and price on online shopping satisfaction. The influence of webpage design on online shopping satisfaction was highlighted by Hasanov & Khalid, (2015), who proposed that customer satisfaction have a direct effect the website quality. They also propose that when the quality online shopping website increases, such as good features, rich information quality, friendly use, and the service quality, customers will tend to visit, use and purchase product or services frequently. The influence of price on online shopping satisfaction was highlighted by Park & Gretzel, (2010), there is positive relationships between

price and online shopping satisfaction. Satisfaction in online shopping will increase when the price is affordable and match with the best product features depend on the price offer by the online sellers. The relationship between product quality and online shopping satisfaction indicates a positive and very strong relationship. Previous researches such as Zhu & Zhang (2010) revealed that the quality of the product plays an important role of determinants for online shopper in online shopping satisfaction. It means that online shopper satisfaction will increase when the product quality matches the price they pay for the product. Furthermore, the results of the correlation analysis indicate a positive and moderate relationship between security and online shopping satisfaction with a correlation value of 0.506. The relationship between security and online shopping satisfaction is also supported by Özpolat, et al., (2013), who mention as the security of online shopping website increases, it will increase the confidence of online shopper to purchase product or services from the online shopping website.

The regression analysis however revealed that only two variables; webpage design and product quality are positive and significant in influencing the changes in the civil servant online shopping satisfaction. Results of the regression analysis also indicate that the most dominant predictor is product quality followed by webpage design as the second most dominant predictor. The researchers proposed that when all four predictors are combined, only product quality and webpage design are the only two predictors are positive and significant in influencing the changes in online shopping satisfaction.

Recommendation

Therefore, in order to online sellers achieve the success of e-commerce, online sellers need to have incredible diversification in attracting online shoppers consistently and to make online shoppers become loyal with the online store or online shopping website. At the same time, it also maintains a long-term relationship between online sellers with online shoppers on the web.

It is well acceptable that an attractive webpage attract potential consumers to visit a webpage, the for an online seller to attract online shopper to come and visit the online shopping website frequently, online seller should improve their website or applications from time to time with an improvement of feedback and rich information content about product or services, upgrade to higher quality server to make customer easy to surf and save time, add more interactive design and attractive start up webpage design.

Presently, online shoppers focus more on good product quality product or services. So, for online seller, it is better for them to control the good quality product before the product sell to customers. So, for those online seller who sell a good quality product match with price, it is good for them to maintain a quality of the product otherwise they will lost their potential customer and existing customer will switch to other online seller.

Security

To enhance online shopper loyalty and trust for small business online seller, online sellers and suppliers should improve their website security such as using more secure payment tools such as Pay-Pal or Hello-pay that allows online shoppers to pay directly using online banking rather than manually deposit their money to the online seller's account. This is because this payment tools offer a more secure payment options for the online sellers.

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ID047 – An Assessment of Trustworthiness in Bundle Clothing Business Blogs

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Abstract

Building consumer trust in blog based business is essential because it strongly influences the consumers' intentions to transact with unfamiliar vendors via the web. Trust allows an online consumer to overcome perceptions of risk and uncertainty. The aim of the study is to examine the blog quality, including the trustworthy elements using the Blog Assessment Index – an adaptation and extension of Web Assessment Index by Miranda and Banegil (2004). Several factors such as owner's profile, customer service, appearance, reliability, reputation, transactional assurance, consensus information, social presence and authority were analysed to determine whether the blogs are trustworthy. The results revealed that the blog quality is at the average level. Thus, it has not fully met the customer's expectations. Meanwhile, the blog owners are aware about the importance of online trustworthy since they have integrated its elements in their blog. However, improvement needs to be translated by integrating all trustworthy elements to ensure that the trust is at the highest level and would help the marketers to gain trust and build a huge and loyal customer log.

Keywords: online trustworthy; blog quality; blog assessment index (bai); blog trustworthy; trustworthy elements

1. INTRODUCTION

A blog is “a web page that serves as a publicly accessible personal journal” (Blood, 2002) and can convey personal, public, political and commercial messages. Normally, owner of the blogs are frequently updating their blogs and most blogs will contain media, including pictures, text, links, audio and video (Carmichael and Helwig, 2006). Blogs originated from the online diaries that became popular in the 1980's. Jorn Barger used the term “weblog” first in 1997 and the short form was coined by Peter Merhold, in the phrase “we blog” that appeared on Peterme.com in 1999 (Merholz, 1999).

Due to a large number of Internet users worldwide, online-business becomes popular medium for conducting business. Internet has brought the marketing management into a new age (Reedy et al., 2000). Everyone can easily and quickly set up a blog using the free blogger

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web sites with a requirement of a very minimum technical knowledge. The pleasant likelihood has given a wide opportunity to business minded people to create their own blogs and have the same potential to be entrepreneurs. What also make blogs an interesting marketing tool is the fact that they can connect with a mass audience in every part of this world at a relatively low cost. The two-way online communication transpire in blogs between the entrepreneur or blogger and customers can build ties and trustworthy between two party.

The keys to a successful blog include posting useful content and providing a user interface that is easy for blog readers to navigate. Blogs that offer a great user experience and that have a growing group of core blog visitors can benefit from word-of-mouth buzz, which can spread quickly and easily over the internet as well as in local communities. This can help drive the traffic growth to both the blog and to the business (Singh and Singh, 2005). However, sometimes online business failed to market their product due to poor quality content.

According to Egan (2009), reader's trustworthiness will depend on consistently high quality content of the blog. Besides that, reputation, performance and appearance are among the crucial factors to be counted on in online business. Lack of trust is one of the factors why people decline to get involved in online transactions. To build trust and strong relationships between buyers and owners is important. Building trust is one of the requirements to do online business and this can be easily achieved through the use of a proper social networking. For those who run the online business stressed that relationship building is a must, not only to sell their products but for long term success as well (Philpott, TJ). In the early stages of Internet development, trust is a critical factor in stimulating purchases over the internet. Trust is central to interpersonal and commercial because it is crucial wherever risk, uncertainty, or interdependence exist Quelch and Klein (1996), (Golembiewski & McConkie), (Morgan & Hunt, 1994). Thus, this research is to discuss the blog quality and trustworthiness.

1.1 Problem statement of the study

Everyone wants to have quick access to everything and this includes shopping activities. Generally, people prefer the most convenient way to buy things. This is due to lack of time and the difficulty for buyers to visit a physical shop because they may have problems with transportation, traffic jam and also parking space. Therefore, blogs provide an alternative for easy access of information to everyone; but the main problem is that most buyers feel reluctant to purchase anything online because they do not trust blogs, the blog owners do not reveal much about the self-information and the buyers feel the risks associated with online transaction.

1.2 Objectives

The objectives of this study are:

1. To investigate the trustworthiness of blog users on bundle clothing businesses blogs.
2. To evaluate 5 main categories to determine the blog quality.
3. To find out what are the most important elements in trustworthiness in evaluating the blog quality.

2. RESEARCH FRAMEWORK AND METHODOLOGY

The researchers' instrument for evaluating online used clothing businesses or well known as 'Baju Bundle' in Malaysia was using Blog Quality Application (BQA) which produced Blog Assessment Index (BAI). The application is an adopting and extending of Web Assessment Index by Miranda & Banegil, (2004). The online entrepreneurs can utilize the application to evaluate the blogs quality on their own to fulfil customers need. The result from this application will help the entrepreneurs to improve their blogs by providing all information needed by the

customers. Miranda & Banegil, (2004) have recommended four main categories to determine the quality of a web site: Content, Accessibility, Navigability and Speed.

Therefore, the researchers have included all categories which were proposed by Miranda & Banegil (2004), and then added one new element to the application that is 'Trustworthy'. Gefen, David. et al, (2003), claims that consumer trust is important to online commerce as online purchase intentions are the product of both consumer assessments of the IT itself and trust in the e-vendor. Online trust is also regarded as a crucial factor for the success of an online enterprise or initiative (Beldad *et al.*, 2010). This factor is crucial to determine the blog quality which has a strong correlation with the success of the online business. Generally, BAI consist of five main components: Categories, Factors, Weights, Total score and Rating, which is in line with what was proposed by Evan and King (1999).

There are five main categories appeared in BQA: Content, Accessibility, Navigability, Speed and Trustworthy. For each of the categories, there are factors that need to be evaluated to determine the blog quality. Each of the factors is listing down based on the literature and researcher's experience representing customer's information needs when buying clothing online. To test the validity of BAI, the researchers use it to analyse Malaysian used clothing business blog, focusing on kids bundle. The blog list of Malaysian used clothing business blog was compiled in a directory which was specifically developed by the researchers for this research. The blog can be reached at www.hentianbundle.blogspot.com.

To get a list of blogs, the researchers have done blogs searching using Meta Crawler, a meta search. By using this kind of search engine, anyone can get results from multiple search engines without having to visit each blog. Only blogs selling bundle clothing owned by Malaysian had been chosen for the purpose of this research. After getting results, each of the blog was classified into three category; Kids, Women and Men Bundle. Then, the URL were copied and added to the blog list according to the categories. Some of the blog links were acquired through the existing blog list in the related blogs. For this research we only focused on Kids Bundle which consists of 74 blogs. Kids Bundle was chosen due to the frequent updates of the blog by the entrepreneurs. Other than that, Kids Bundle are well accepted by their followers since the price are far low compared to the new items for a rapidly grown kids' products.

For kids bundle blogs, 69 of them have been examined. Out of those, some of them were discarded as it no longer active. The blogs have been classified as inactive when it were not updated for more than three months or when the owners have declared in the blogs that they will or have ended the business.

The list in Appendix 1 contains a complete sample of our research together with their Uniform Resource Locator (URL). A standard questionnaire had been developed for the purpose of data collection. The questionnaire consists of five sections:

- Section 1: Content Assessment
- Section 2: Accessibility
- Section 3: Navigability
- Section 4: Speed
- Section 5: Trustworthy

The data collection process involved all the researchers. To gather all required information, a thorough content analysis was carried out onto every blog. Content analysis is a method to examine written documents included web pages. Content analysis, though it often analyses written words, is a quantitative method as the results of content analysis are numbers and percentages (List, 2005). According to Berelson (2008), content analysis is a related technique to narrative analysis and may provide even more results for the corporate blog manager.

Content analysis also involves the counting of associated words, phrases or themes within a document. The content which will be analysed can be in any form to begin with, but is often converted into written words before it is analysed. The original source can be printed publications, broadcast programs, other recordings, the internet, or live situations.

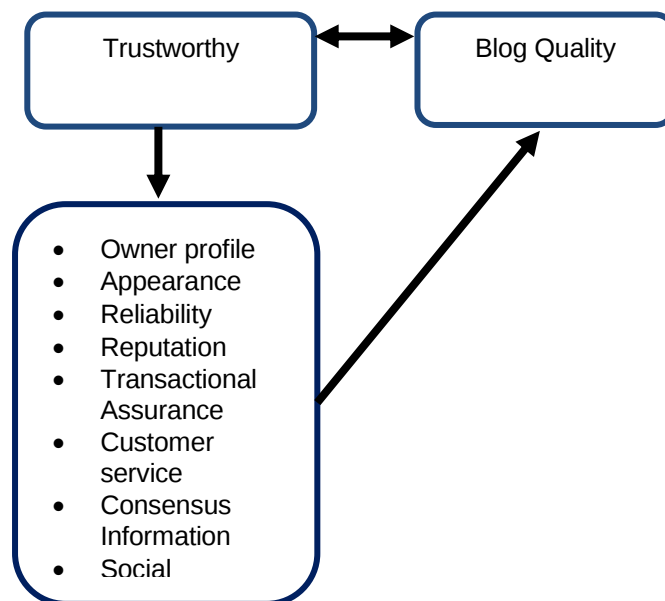


Figure 1: Quality level determination of a blog

Trustworthy Elements

Trust can be used as an important construct, property or mechanism to interpret interpersonal behaviour under social institutions and viewed as the expectation of regular, honest, and cooperative behaviour based on commonly shared norms and values. Zucker (1986) and Fukuyama, (2001). Shneiderman (2000) however pointed out that recommendations from past and present users or from a third party can help to promote consumer trust towards the website. Briggs, et al. (2002) indicated that what is most important is that the website design should look and feel appealing and that information conveyed should be reliable and trustworthy, with a clear and real service, including links to relevant alternative opinions or products. Wu et al. (2008) stated that online shoppers' trust toward certain shopping websites may affect their adoption of the website system. In addition, through increasing communication with other online shoppers, websites can promote consumer trust as well as their assessment of the shopping sites in terms of perceived ease of use and perceived usefulness and, therefore, enhance consumers' willingness to use the site. Therefore, trust is a critical factor in stimulating purchases over the Internet, we have allocated 35% to this section. One of the nicest ways through which online retailers can gain trust is to make the online store more humane. The consideration for blog trustworthy is based on each of these factors:

- i. **Owner/Marketer profile:**
In order for customers to have more confidence with the blog owner before they proceed with the transactions, they must at least know some information about the blog owner. Thus, Strader and Ramaswami (2002) suggested that this include the reputation of the seller, prior interactions and satisfactory dealings with the seller, the size of the seller and the seller's location, longevity and responsiveness to the buyer's information requirements.
- ii. **Appearance of the blog:**
Professionally designed, neatness, sparseness, organization and clarity will show the credibility of the marketers.

- iii. **Reliability:**
It is important to the marketers to show their expertise and competency to do the job effectively. Reliability refers to the belief that the seller has the expertise and competence to do job effectively (Shankar, Urban and Sultan, 2002). This is due to the fact the buyers run the risk of the seller may not reliably deliver goods and services of the quality expected (Strader and Ramaswami, 2002).
- iv. **Reputation:**
According to Strader and Ramaswami (2002), the factors found to be highly important for affecting consumer's perception of seller trustworthiness are reputation of the seller and quality of previous dealings with the seller. Strader and Ramaswami (2002) added that reputation speaks for the sellers' record of honest and concern for meeting needs of buyer. They also added that a good reputation is a signal the seller has not previously engaged in opportunistic behaviours harmful to buyers.
- v. **Transactional assurance:**
According to Westin and Maurici (1998), it is important to provide an environment for secure transactions and information privacy because most US consumers (84%) are concerned about the invasion of privacy and the loss of personal information over the Web. Online companies implement a private information protection mechanism to improve the commercially valuable relationships with customers (Wang, Lee and Wang, 1998).
- vi. **Customer service:**
Strader and Ramaswami (2002) added that for the buyers to have good reasons to purchase online is if they are satisfied with the responsiveness of the blog owner toward buyer's information requirement. This relates to the responsiveness of marketers by providing a quick respond to the customers query. The marketers may add communication information and tools to the blog such as contact number, chat tools, e-mail, instant messaging or any social media account to show that they are reachable and accountable to the business.
- vii. **Consensus information:**
This consensus information concerns whether the majority of consumers have had positive or negative experiences with the same product or retailer in the past (Darke, Ashworth and Ritchie 2008). Moreover, online consumers can access such information in many forms, including aggregate customer satisfaction or service ratings provided by third-party websites.
- viii. **Social presence**
Replicating physical interaction/degree of feeling, perception and reaction.
- ix. **Authority**
Registration with any authorization body such as Suruhanjaya Syarikat Malaysia will be an added value to the online business as the customers want to ensure that the marketers are a real business and/or person to deal with and not an automated machine or a piece of junk software.

3. FINDING AND DISCUSSION

There are 69 respondents who rated the scores. This research used a scale of 1 to 3 which 1 represent disagree, 2 for neutral and 3 for agree in the questionnaires. Trustworthy factors are measured based on owner's profile, appearance, reliability, reputation, transactional

assurance, customer service, consensus information, social presence and authority. Below are the findings for each of the factors:

Table 1: Findings

Factors	Score
1. Owners' profile	26% of respondent agreed that most of the blogs reveal the owner's important information
2. Appearance	50.72% of respondents agreed that the blog appearance is professionally designed and well organized.
3. Reliability	47.82% believed that the blogs provide a clear purpose of the business, terms and condition and quality assurance of the products offered.
4. Reputation	57.97% of the respondents agreed that they found records for honesty and concern for meeting the requirement of buyers can be indicated by providing vital information such as payment, order list and sales information available in the blog.
5. Transactional Assurance	57.97% of the respondents believed that payment and delivery methods are clearly stated in the blog, with information on how to place an order, making payment and delivery services.
6. Customer Service	A majority or 52 respondents, which represent 75.36% of total population, believe that the responsiveness of the blog owner is to provide a quick response to the customers query. The blog owner may respond by phone, chatting, email, IM or any social media account to show that they are reachable and accountable to the business.
7. Consensus Information	52.17% of respondents agreed and believed that consensus information is a type of agreement in the judgment reached by a group as a whole. This reflects things such as feedback, comment, followers in the blog that result in the trustworthiness towards the marketers. Preliminary research conducted by Deloitte and Touche (2007) suggests that 62% of online consumers consult customers' feedbacks before making a purchase, and 82% report that their purchase decision is affected by these feedbacks.
8. Social Presence	89.85% or 62 respondents agreed and felt that there are physical interactions among blog owner and buyers which later will reflect to degree of feeling, perception and reaction.
9. Authority	17 respondents found 17 blogs are registered with Suruhanjaya Syarikat Malaysia (SSM). SSM is a business license that will be an added value to the online business as the customers want to ensure that the blog owners are a real business

The study has shown that majority of the blogs are at the average level of quality except for social presence. It means that the blog owner needs to do a lot more improvement based on the achievement for every category which was assessed using this application. From the result, the minimum score for this study is 45% while the maximum score is 93%. There is only one blog at the very high quality and 17 of them at high quality. The biggest numbers of blog or 50 of them are at average level and only one of them at low quality level.

Trustworthy

Trust is at its highest level when the trustee believes the trust target is credible and is willing to rely on. Thus, trustworthy has been assessed using several factors such as owner profile, appearance of the blog, reliability, reputation, transactional assurance, customer service, consensus information, social presence and authority. From our analysis, all blogs are achieving 15% and more from the total of 35% trustworthy score. The result has shown that the marketers have a good sense of trustworthy and aware the importance of trustworthy elements in the online business.

Kiddycloths is the only blog that achieved the highest trustworthy score which is 34% out of 35%. The blog owner has utilized almost all the trustworthy elements to ensure that the customers do the shopping with confidence at their pleasure. Based on our observation and information available from this blog, the blogger managed to sell almost every clothes every time she does the upload. Meanwhile, the average score for this criterion is 27.4%. It is shows that most of the marketers are aware that trustworthiness is an important element in online business but they need to add few more information as what we suggested in BQA to achieve high level online trustworthiness. Trust in the seller must come first, and then it will be followed by further action such as order fulfilment processes.

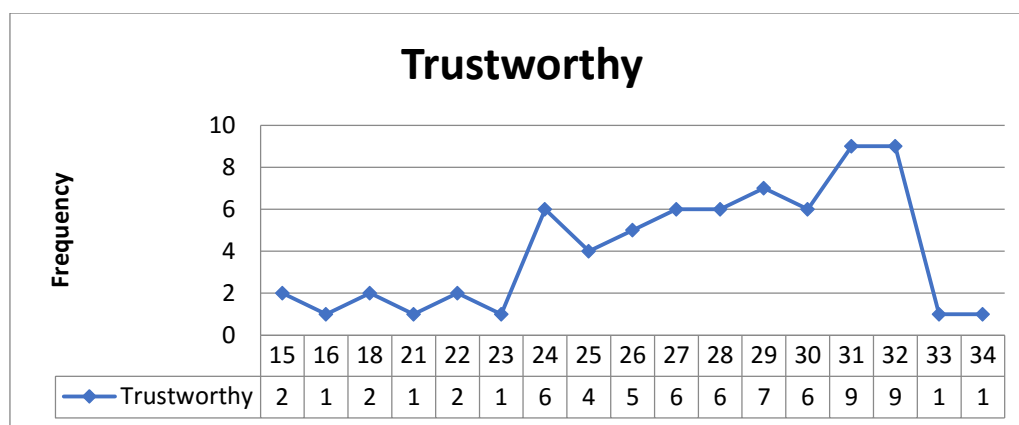


Figure 2: Data analysis for Trustworthy

4. CONCLUSION

In conclusion, the most significant finding for the research is customer service and social presence. This is due to the buyers' belief that the responsiveness and physical interactions of blog owners leads to the degree of feeling, perception and reaction that will reassure them to buy clothes from these blogs. However, other elements such as owner profile, appearance, transactional assurance and consensus information are important too in order to gain the trust of the buyers.

Consequently, trustworthiness among buyers will also determine the success or failure of many online businesses. Thus, the blog owners need to be aware of customers' expectations and improve the five elements of trustworthiness accordingly.

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ID083 – Predictor Factors of Stress among Secondary School Teachers in Pasir Puteh, Kelantan

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Abstract

The purpose of this study is to determine the factors that contribute stress among secondary school teachers. The subjects of this study are 180 secondary school teachers in Pasir Puteh, Kelantan. In this study, the researchers have chosen a stratified random sampling as the sampling method in conducting the survey. The determinant factors selected for this study includes are interpersonal relationship, work condition, time constraint and faith and belief. The instrument used in this study is a questionnaire which is divided into several sections. Results of the multiple regression analysis, indicates that only two (2) independent factors (interpersonal relationship, faith and belief) have a significant influence on the stress level among secondary school teachers. Furthermore, we propose the teachers to socialize with staff, students and parents in social event as an alternative to reduce their stress level. For future study, researchers may explore other predictors of stress level among teachers such as student's discipline problem, school's regulation and work discrimination. Stress level that is not controlled is a serious phenomenon and associated with a range of factors, when untreated may create low productivity and low-quality work among school teachers

Keywords: stress, interpersonal relationship, work condition, time constraint, faith and belief.

1. INTRODUCTION

The teaching profession has become a job that is prone to many stresses and it comes of no surprise that the level of teacher's stress have increased both nationally and internationally as of late (McIntyre, 2015). A survey of teachers conducted by the National Union Teachers (NUT) in 2010 found that 81.2 per cent experienced stress, anxiety or depression at work. Stress means pressure. Stress outcomes can be positive or negative. Stress can be positive when the situation offers an opportunity for a person to gain something. Negative stress when a person faces social, physical, organizational and emotional problems. Teachers with the high levels of stress cause emotional exhaustion, depersonalization, reduced personal accomplishment, absenteeism, and exit from the teaching profession (Betoret, 2006; Kyriacou, 2001). Teachers are experiencing high stress level because too many demands from too many people, too many deadlines, not enough resources, trying to juggle competing agendas, lots of pressure from school administration, and constant expectations of immediate results/responses to requests for information or behavior reports (Yahya et al., and Hartika, 2012). It is important to explore and practice alternate coping strategies to help teachers cope with their stress level. This will allow teachers to have a greater sense of purpose, motivation, and clarity about their own abilities (Bachkirova, 2005). We postulate that teacher's stress is a serious phenomenon and as high levels of stress are associated with a range of causal factors, including intrinsic factors, individual vulnerability and systemic influences.

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The objective of this study is to identify the predictors or factors that contribute to the stress level among teachers from three secondary schools in Pasir Puteh, Kelantan. The result of this study focuses only on these three selecting secondary. The schools were Sekolah Menengah Kebangsaan Seri Aman (SMKSA) with 909 students (480 of male students and 429 of female students), Sekolah Menengah Kebangsaan Tok Janggut with 1356 (672 were male students and 684 female students), and Sekolah Menengah Kebangsaan Kamil with 1276 students (463 were male and 813 were female). The total number of teachers who are teaching in these three secondary schools is 309 (93 teachers from SMKSA, 112 from SMK Tok Janggut and 104 teachers from SMK Kamil).

2. LITERATURE REVIEW

2.1 Stress

Stress can be defined as the way a person feels when he or she is under abnormal pressure. Stress can be positive or negative. Negative stress may contribute to poor relationship with spouses, children or other family members which may lead to divorce, low productivity, high absenteeism and bereavement between friends and family members. High stress is also shown by symptoms such as weight gain or loss, easiness to anger, frequency headaches and low productivity (Hanes, 2002). Moderate level of stress, however may motivate employees to perform better. It also makes us more alert and can help us perform better in situations such as job interviews or public speaking. Although stress itself is not a disease, it is recognized that excessive or prolonged stress can be a cause of mental and physical illness.

Many teachers face high stress at work because of the excessive workload and long working hours, pupil's rough behavior, which is often compounded by issues such as large class sizes, pressures of assessment targets and inspection, mistreatment by school management and lack of career opportunities (Cormaks, 2000). The high level of stress faced by teachers can cause a variety of negative effects such as unsatisfactory performance and job dissatisfaction among teachers (Sunbul, 2003).

2.2 Interpersonal Relationship

Interpersonal relationship refers to relationships teachers have with fellow professionals or community members within the educational environment. This relationship is forged between teachers and the school administrator such as committee head lesson, education chief, extra-curricular senior assistant, senior assistant student affairs, and senior administrative assistant and also school principals. Conflict between teachers and school administrators is one of the contributors of stress among teachers. This conflict is partly due to the behavior of among teachers, who sometimes brought their personal problems to school. Consequently, this culture will affect their entire school community (Kamaruddin, 2007). According to Haraway (2005), interpersonal conflict will eventually leads to a feeling of anxiety when individuals are faced with difficulties if the individuals failed to seek consultation and this create unwanted stress to the concerned individual. We propose that the most common stressors are conflict with other staff members, and a lack of social support from supervisors and coworkers (Bachkirova, 2005).

2.3 Work Condition

Leather et al.,(2010), argues that work conditions refer to the conditions in which an individual or staff perform their work related activities, including but not limited to such things as amenities, physical environment, stress and noise levels, degree of safety or danger, and other working environment. It's important to understanding and observed the association between the physical work conditions and the intangible environment such as the appraisal process, accommodating and integrating physical and psychosocial elements and the role of individual differences. Poor working conditions may also influence and affect the performance of employees (Cameron, 2000). Improving the working environment may also decrease the risk of illness of employees thus reducing the rate of stress.

In the context of this study, working conditions can also be described as variables that may contribute to the stress level among employees. In other words, whether employees' current working condition is fun and enjoyable, boring, challenging, good, comfortable, easy, respected, healthy and whether it leads to satisfaction. Alexandros et al., (2003) argued that "factors intrinsic to the job" refers to the workload and variety of tasks. For instance, the changes in new curriculum requires teachers to be experts in giving knowledge thus it can cause additional workload to the teachers especially in preparing for classes and teaching material to students (Yahya and Hartika, 2012).

2.4 Time Constraint

Time constraint exists in all parts of a person's life, from school and college to the workplace and even in the sports and entertainment industry. Skills in managing stress under time constraint are important to workers, students and entertainers to cope with such artificially imposed pressure. According to Christopher (2004), when workers are unable to manage their job and the work system, they suffer unmanageable demands and pressure that consequently lead to high level of stress.

Previous research by Kamaruddin (2007), he stated that teachers are always attending meeting and workshops that sometime take many days and they are forced to leave their class. In addition, many teachers may not have enough time to finish their syllabus. In this situation, it will contribute more stress to teachers.

2.5 Faith and Belief

Faith is a belief or trust in God to create a positive mood and mental health. When a person knows that he or she is not alone providing great sense of comfort, inner peace and ultimately, relief from stress. Although many scholars job stress is the consequence of work related factors, interaction between the individual and their workplace, their whole experience is said to *be the work of God (Confusing)*. For that reason, "back to God" is one of the solutions for stress. By trusting in God, people feel that rewarding outcomes are possible and this boosts a positive outlook. For Muslims, there are many ways to be close to Allah such as do a lot of reading of al-Quran and thinking of dying (Irfan Butt et al., 2014). A prayer is also as a great way to relief stress because a person does not feel they have to bear their burden alone. According to Loewenthal (2001), Muslims are more likely to engage in religious activities when dealing with depression than to seek professional help or utilized other methods.

3. RESEARCH METHODOLOGY

3.1 Research Framework

This research was carried out to identify the predictor factors that contribute stress among secondary teachers. The framework in this study involved the independent variables such as interpersonal relationship, work condition, time constraint, faith and beliefs, meanwhile the dependent variable is a stress among secondary teachers. An overview of the research framework is depicted in the Figure 1:

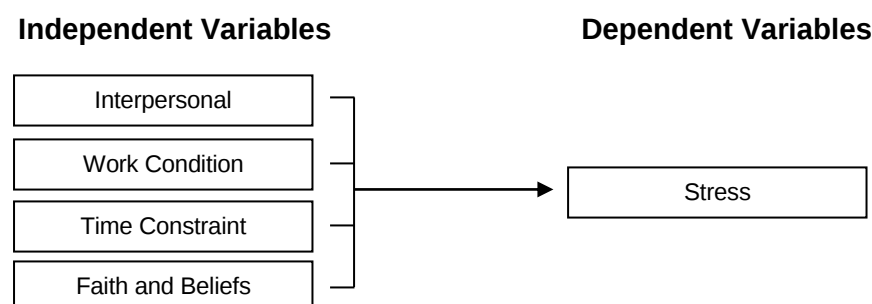


Figure 1: Conceptual Research Framework

The target respondents was respondents among teachers teaching at three (3) schools, which were SMK Seri Aman (93), SMK Tok Janggut (112) and SMK Kamil (114) in Pasir Puteh Kelantan with total to be 309 teachers. They were permanent teachers who have three (3) years and above teaching experience. As suggested by Krejcie and Morgan (1970), the appropriate sampling size for this study was considered to be 180 respondents. This research was used a probability sampling which is stratified random sampling.

In order to collect the data, a set of questionnaire was developed consisting of six (6) section which are Section A: Profile Respondent, Section B: Stress Factors (interpersonal relationship), Section C: Stress Factors (work condition), Section D: Stress Factors (Time Constraint), Section E: Stress Factors (faith and belief), and Section F: stress at work. Most of the variables in Section B until Section F are measures using Likert Scale-10 point. In strengthening the validity of the measurement, this study was adopted the questionnaire from previous research done by Toha, (2011). The data collected will be analyzed both using descriptive and differential analysis. To ensure the accuracy of the analysis, the raw data was cleaned before the analysis is conducted. A descriptive analysis is conducted to determine the frequency and percentages of elements of the respondent's characteristics. Furthermore, the correlation analysis and the multiple regression analysis were chosen as part of the inferential analysis to determine the strength and direction of the relationship between the independent and dependent variables.

4. FINDINGS AND DISCUSSION

Frequency distribution was obtained for all the personal data related to demographic profiles such as gender, age, qualification, marital status, department, monthly income and years of service. Followings are the result of demographic analysis on the information of the respondents from Table 1.

The observation of the sample involved 66 (36.7) % male and 114 (63.3) % female respectively. 162 (90%) out of 180 respondents were married, followed by 13 (7.2%) respondents were divorced and 5 (2.8%) respondents were single. In term of age, the respondents were divided into 4 categories, 89 (49.4 %) respondents were in the third category (41 - 50 years old), followed by those in second category of 31 - 40 years old which made up of 75 respondents (41.7%). As those within the category of 21 - 30 years old and above 51 years old the samples were made up of 9 respondents (5 %) and 7 respondents that is 3.9% respectively.

In terms of the composition of race, the results revealed that the majority of the respondents were Malays (99.4%) and Chinese 1 (0.6%). The majority of the respondents 155 (86.1%) were qualified by bachelor degree and the rest of 25 respondents (13.9%) had master degree. In term of monthly income, mostly 108 respondents (60%) of the sample were from the income category of RM 4001 – RM 10 000. Those within the income bracket of RM 3001 - RM 4000 and RM 2001 – RM 3000 respectively were 64 respondents (35.6%) and 5 (2.8%) respondents. For the income range, more than RM 10 000 it represented the number of 3 respondent (1.7%). Most of the respondents 77 (42.8%) had been in the service between 11-15 years, followed by those with 16 years and above were 52 respondents (28.9%). As for those serving for 6-10 years and 1-5 years, they were respectively 45 (25%) and 6 (3.3%).

Table 1: Profile of Correspondents

Demographic Value	Category	N	%
Gender	Male	66	36.7
	Female	114	63.3
	Total	180	100
Marital Status	Single	5	2.8
	Married	162	90.0

	Widowed	13	7.2
	Total	180	100
Age	21 - 30 years old	9	5.0
	31 – 40 years old	75	41.7
	41 – 50 years old	89	49.4
	51 years old and above	7	3.9
	Total	180	100
Race	Malay	179	99.4
	Chinese	1	0.6
	Indians	0	0
	Others	0	0
	Total	180	100
Higher Educational Level	STPM	0	0
	Bachelor Degree	155	86.1
	Master Degree	25	13.9
	PhD	0	0
	Total	180	100
Monthly Income	RM2001 – RM3000	5	2.8
	RM3001 – RM4000	64	35.6
	RM4001 – RM10000	108	60.0
	RM10001 and more	3	1.6
	Total	180	100
Years of Service	1 – 5 years	6	3.3
	6 – 10 years	45	25.0
	11 – 15 years	77	42.8
	16 years and above	52	28.9
	Total	180	100

In order to identify to reliability and validity of the questionnaire, the procedure of reliability testing was executed. According to Sekaran and Bougie (2010), in general, reliability less than 0.60 are considered poor, those in range of 0.70 are acceptable and those over 0.80 are good.

Based on Table 2 below, Interpersonal Relationship showed a Cronbach Alpha value of 0.597 for 10 items. In order to get an acceptable result, two (2) items was deleted and the result was 0.658 which is moderate but acceptable. For the Work Condition variable indicate that Cronbach Alpha for 10 items is 0.883. Thus, all 10 questions for this dependent variable are considered as very good. As for the variable on Time Constraint, the Cronbach Alpha is 0.536 which mean the scale for time constraint is considered as poor. Four (4) items were deleted, to raise the Cronbach Alpha to an acceptable value of 0.673, hence reaching an acceptable level. Furthermore, the Cronbach Alpha for the independent variable, Faith and Belief was initially 0.662 and one (1) item was deleted to get a good result which is 0.767 Cronbach Alpha. As for the stress factor indicates that the Cronbach Alpha is 0.554, and after deleting two (2) items the result of 0.613 is considered to be acceptable. The above procedures followed the suggestion proposed by Coakes et al. (2010).

Table 2: Reliability Analysis Result

Variable	Before (N of Items)	Cronbach's Alpha	After (N of Items)	Cronbach's Alpha
Interpersonal Relationship	10	0.597	8	0.658
Work Condition	10	0.883	10	0.883
Time Constraint	10	0.536	6	0.673
Faith and Beliefs	10	0.662	9	0.767
Stress	10	0.554	8	0.613

Multiple regressions were deployed in this research in order to determine which of the four (4) elements in evaluation factor of stress among teachers. Table 3 summarized Multiple Regression Analysis result for all environmental factors (Interpersonal Relationship, Work Condition, Time Constraint and Faith and Belief) towards dependent variable (stress factor). The multiple correlation coefficients (*R squared*), of all the predictors demonstrated that 37.8 % of the variance in the stress factor can be predicted from the interpersonal relationship, work condition, time constraint and faith and belief, while the remaining 62.2 percent is not explained and need further investigation. The overall result indicated that only two (2) variables Interpersonal Relation, Faith and Belief were significant at 5% confidence level. Furthermore,

Work Condition and Time Constraint does not provide enough evidence to influence the dependent. The other two remaining independent variables of Interpersonal Relationship; $\beta=0.377$, $p<0.05$, and faith and belief: $\beta=0.211$, $p<0.05$, has a positive and significance influence on the stress factor among secondary school teacher. Hence, the researchers conclude that the research objectives were achieved.

Table 3: Multiple Regressions Analysis Results

Model	Standardized Coefficient (Beta)	t	Sig.
Interpersonal Relationship	.377	3.297	.001
Work Condition	.143	1.345	.180
Time Constraint	.025	0.276	.783
Faith and Beliefs	0.211	2.970	.003
R	.615 ^a		
R ²	.378		

a. Predictors: (Constant), FB_MEAN, TC_MEAN, WC_MEAN, IR_MEAN Dependent Variable: SF_MEAN

5. CONCLUSION

In this the study, it can be concluded that all four determinants are significant and positively associated with the changes in the stress level of the teachers in Kelantan. It shows that the questionnaire is valid and reliable. The factors that contribute stress among teachers are interpersonal relationship, faith and belief. This result will further provide the relevancy of sustaining the importance of establishing interpersonal relationship as well as instilling the noble faith and belief towards ensuring that stress can be effectively managed.

Talking to friends and family is also important to know the source of stress and to overcome stress with effectiveness like by socializing with staff and other students at a cafe after school or participating in social events. Moreover, the society especially parents and family should play their role by giving their support to help teachers by not making ourselves as sources of teacher stress (Yahya and Hartika, 2012).

In the future, we proposes that researchers conducting research on the same issues should also investigate other independent variables such as student's discipline problem, school regulations, heavy workload, discrimination or harassment at work in order to obtain more effective result (Mittler, 2000).

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ID084 – The Relationship between Extrinsic Factor and Employee's Motivation

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Abstract

Work motivation is about the willingness of the employee to contribute efforts in delivering their task and work. Therefore, Work motivation is crucial for any dynamic organization be it private or public institution. The research is conducted to investigate the motivation among employee's specifically non-academic staff in a public higher learning institution in Terengganu. This study explores the relationship between three elements of extrinsic factor namely; working condition, payment and interpersonal relation towards the employee's motivation. The results of the test are obtained via Descriptive Statistic (Frequency) and Inferential Statistic (Correlation) in Predictive Analytics Statistic Software (PASW-20). Result shows that all independent variables have significant relationship towards employee's motivation with weak and moderate coefficient correlation statistically significant at 0.000. By using multiple regression analysis, interpersonal relation dimension exhibits the most influence factor towards employee's motivation.

Keywords: *extrinsic factor; working condition; payment; interpersonal relation; employee's motivation*

1. INTRODUCTION

Motivation is an important element that is used to inspire people to achieve organization aims and purposes. Chaudary & Sharma (2012) stated that motivation is the process of inspiring people to achieve goals and mission. While Jacobsen et. al (2014) explain motivation as a combination of need, force and incentive but may decrease because of command systems and financial incentives. It is obvious that motivated people make decisions to dedicate considerable effort to obtain things that they value and well-motivated employees can build a national and international reputation for themselves and the organization. Recent study by Khan et. al (2013) show extrinsic and intrinsic have equal importance in creating employee's motivation. The focus of this research is two aspects; first to identify the relationship between extrinsic factor and employee's motivation and second is to identify the crucial factor toward employee's motivation in the organization.

1.1 Background of the Study

Motivation is the driving force that makes people willingly to put in their best in what they do. Motivated employees are needed for the survival of the organizations and it helps to increase productivity. In addition, motivated employee will lead to higher work performance better relationship and interaction among colleagues. When employees are motivated they respond by factors outside themselves known as extrinsic either for positive or negative reasons. The key findings of this study are that extrinsic factor has significant relationship towards employee's motivation. Njmbi (2014) identify extrinsic factors to be work condition,

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pay, fringe benefits and the work environment among others. Research conducted is to study the relationship between extrinsic factor and employee's motivation at workplace focusing on non-academic staffs at a Public Higher Learning Institution in Terengganu. staffs.

1.2 Problem Statement

Recent survey showed that the public higher learning institution have low score in the happiness index. This low happiness index is deemed as a problem as it normally relates to poor employees' motivation in an organization. High happiness index is desirable as it is the indicator of happy employees that lead to high motivation hence boost employee to work harder, better and more loyal towards the company. Therefore, this study is done to unveil the factors that increase work motivation as well as reason why motivation is paramount to non-academic staff in this institution. Theoretically, motivation is heavily linked to job satisfaction thus identifying critical factors that increase motivation will lead to higher happiness index.

1.2.1 Objectives of the Research

- I. To identify the relationship between extrinsic factor namely working condition, payment and interpersonal relation and employee's motivation.
- II. To identify the most influence factor towards employee's motivation.

1.2.2 Research Hypotheses

- H₁ There is a significant relationship between working condition and employee's motivation.
- H₂ There is a significant relationship between payment and employee's motivation.
- H₃ There is a significant relationship between interpersonal relation and employee's motivation.

1.2.3 Scope of the Study

The respondents of this study are non-academic staffs from ten departments in one of the public higher learning institution in the state of Terengganu. This study focused the relationship between extrinsic factor namely working condition, payment and interpersonal relation as independent variable with employee's motivation as dependent variable.

1.3 Literature review

Employee's motivation

Motivation is the processes that account for an individual's intensity, direction and persistence of effort toward attaining a goal (Embi et al., 2016). When someone is motivated, he or she will persistently exert high effort in a direction that benefits his or her organization in order to achieve goals. Hence, motivation will reflect their behavior and effort in doing their job well. Njambi (2014) defined motivation as the process by which a person's efforts are energized, directed, and sustained toward attaining a goal. Motivation is crucial in harnessing effective performance of university staff. A committed and motivated employee with intensely high level of job involvement is measured as an important asset to an organization.

Extrinsic Factor

Giancola (2014) explain that extrinsic motivation is not linked to the satisfaction that the employee achieves when performing a task but rather from the external outcomes such as financial rewards or incentives. On the other side Buberwa (2015) refers extrinsic motivations as the motivation that comes from external factors such as incentives like pay, fringe benefits, and good working conditions. This is parallel with Bergstorm & Martinez (2016) description that an extrinsically motivated employees are motivated when they get positive appraisal or reinforces provided by other people, and they are often motivated by factors like their salary at the end of the month or a bonus, raise, or promotion. For this research the extrinsic factor that is highlighted are working condition, payment and interpersonal relation.

Working Condition

Working condition refer to the environment in which one works influenced by factors such as cleanliness, lighting, equipment, paid overtime, uniforms and access to amenities. Alafi et. al (2013) mention that good working conditions lead to positive thinking increment, innovative contributions to the job, and readiness as well as eagerness to work. Therefore, organization need to ensure that the working conditions for the employees are safe and conducive to enhance efficiency, creativity and productivity. There are many types of working conditions that affect the employees and the work atmosphere. According to Odukah (2016) naturally employees prefer working conditions that they view as safe and able to develop more sense of motivation from their work. While Bigirimana et. al (2016) argue poor working conditions will provoke negative performance since employees' job demand mentally and physically tranquility. It shows that the factor of working condition is important to enhance employee's calmness and their work motivation.

Payment

Monetary incentive motivates employees and enhance commitment in work performance thus psychologically satisfy a person and leads to job satisfaction beside able to shape the behavior of subordinate toward work in the organization. Motivation through financial or payment will encourage the employees of the organization to seriously do his/ her work and responsibilities (Bergstrom & Martinez, 2016). Good salary is also a valuable instrument that play a significant role to improving employee performance and also increase organization productivity.

Interpersonal Relation

A good interpersonal relation is an important factor in fostering employee motivation. People seek friendly, warm and cooperative relationships with others not only for what these relationships produce in the immediate present, but also for what they provide in times of need such as social support. Venkataramani et. al (2013) admit being happy with a group of friends improves workplace relationships. Organization management that act to maintain good relations with their employees will display behaviors such as help with job related problems, awareness of employee difficulties, good communication, and regular feed-back about the performance of each employee. These basic themes relate to having a good relationship at the workplace, where there is an open communication that allows personal relationships to be developed. Madlock & Booth-Butterfield (2012) emphasized that co-workers' relations are an important source in providing support to co-workers and enhance employee satisfaction. Similar to Venkataramani et. al (2013) stated if the individuals have more negative relationships with coworkers, they might experience negative moods and emotions. Hence, employees need to have good relationship and enjoy working together to avoid negative feeling.

2. METHODOLOGY AND RESEARCH DESIGN

Figure 1 below serves as the research framework where three variables (working condition, payment and interpersonal relation) is used to access the employee's motivation in the institution.

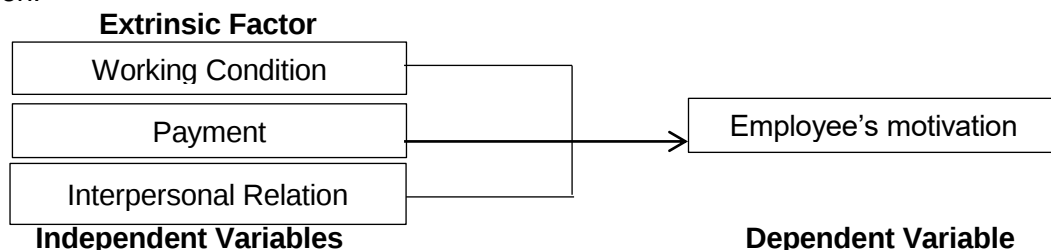


Figure1: shows theoretical framework of employee's motivation

The research population comes from 305 non-academic staffs from ten department of the public institution.

2.1 Research Design

The instrument for this study is a questionnaire that contained various questions regarding the information of the dimensions that contributed to the employee's motivation. The questionnaire consists two main sections which is Section A involves questions related to profiles of respondents. Sections B involves question to determine the Extrinsic factor towards motivation level which is divided into 4 segments as follow: 5 questions related to the employee's motivation, 5 questions on working condition, 5 questions for payment 12 questions for interpersonal relations. To measure the items, the instrument adopted a five-point Likert Scale ranging from 1-Strongly Disagree, 2-Disagree, 3-Moderate, 4-Agree and 5-Strongly Agree.

2.2 Sampling Techniques

Quota sampling is used to generate a sample of non-academic staffs by department. There are 305 non-academic staffs in ten departments and the sample size for this study is 266 employees. The sample is selected from each department based on Krejcie & Morgan (1970) as shown below:

Table 1: Number of sample (s) for non-academic staffs

Department	Population	Sample Size
Rector's Office	30	28
Campus Police	38	32
Administration	39	32
Students Affairs	52	44
Finance	21	19
Academic Affairs	33	28
Research, Industry, Community & Alumni Networking	4	4
Facilities	40	36
Hotel	22	19
Library	26	24
Total	305	266

Source: Administration of the institution, 2017

2.3 Questionnaire Design

Data are collected by using a well-structured questionnaire with questions in prearranged order. The questionnaire items were developed by the researchers to suit this study. The questionnaire is sectioned into 5 main areas. Section A dealt with the demographic profile which included employees' general information such as gender, race, age, income and others. Section B represented the dependent variable which is the employee's motivation. Section C touched on the first independent variable which is working condition. Meanwhile, Section D focused on the payment. Lastly, Section E highlighted the third independent variable named interpersonal relation.

2.4 Data Collection

Each non-academic staff was given a self-administered questionnaire. To ensure sufficient data gathered accordingly, the researchers interviewed non-academic staff who were in their workstation, computer laboratories, library and hotel. The average time taken by each respondent was almost 20 to 30 minutes. A total of 270 questionnaires is distributed and 180 (67 percent) were returned. However, 17 sets are discarded due to incomplete data, resulting in merely 163 usable responses.

3. ANALYSIS AND RESULTS

All values yield alpha coefficient surpasses the values of 0.70 suggested by (Hair et al., 2006). Base on the result of Cronbach's Alpha coefficient value, this questionnaire is allowed and applicable. Reliability estimates (Cronbach's Alpha) for the construct's dimension are as

follows: employee's motivation (0.724) consists of 5 items, working condition (0.773) made up of 5 items, payment (0.856) contains 5 items and interpersonal relation (0.788) comprises 5 items, which all suggesting a high degree of reliability.

3.1 Frequency Distribution

Frequency distribution used to determine the demographic profile of the respondents. It consists of gender, age, race, marital status, department, working experience and salary. The participants in this study are predominantly male (53.4 percent) and all the respondents are Malays aged between 35–40 years old (37.4 percent). Most of them are married (80.4 percent) and majority has working experience with the institution more than 10 years (53.4 percent). Most of their income are between RM1000 until RM3000 (58.3 percent) and majority are working in student affairs department (20.9 percent). Full details are shown in table 3.

Table 3: Demographic Profile of Respondents

Profile	Description	Frequency	Percent (%)
Gender	Male	87	53.4
	Female	76	46.6
Age	20 - 25 years	2	1.2
	25 - 30 years	16	9.8
	30 - 35 years	45	27.6
	35 - 40 years	61	37.4
	40 - 45 years	20	12.3
	45 - 50 years	10	6.1
	Above 50 years	9	5.5
Race	Malay	163	100.0
Marital Status	Single	32	19.6
	Married	131	80.4
Department	Rector's Office	12	7.4
	Campus Police	16	9.8
	Administration	23	14.1
	Student Affairs	34	20.9
	Finance	11	6.7
	Academic Affairs	11	6.7
	Research, Industry, Community & Alumni		
	Networking	2	1.2
	Facilities	26	16.0
	Hotel	10	6.1
	Library	18	11.0
Working Experience	Below 1 year	0	0
	1 - 5 years	25	15.3
	6 - 10 years	51	31.3
	Above 10 years	87	53.4
Salary	RM1000 - RM3000	95	58.3
	RM3000 - RM6000	62	38.0
	RM6000 - RM9000	5	3.1
	Above RM9000	1	0.6

3.2 Correlation among Variables

Pearson Correlation is used to test for association. The result of Pearson Correlation (shown in Table 4) supports the notion that there is a significantly positive correlation between employee's motivation and extrinsic factor specifically; working condition, payment and interpersonal relation. Based on Hair, et al., (2003), the dimensions of extrinsic factor that consist of working condition and payment demonstrate a significant weak correlation with employee's motivation ($r = 0.262$ and 0.167 , respectively). However, interpersonal relation statistically shows a more significant correlation with employee's motivation ($r=0.573$).

Table 4: Correlations among variables

	EM	WC	P	IR
Employee's Motivation (EM)	1.00			
Working Condition (WC)	0.262*	1.00		
Payment (P)	0.167*	0.417**	1.00	
Interpersonal Relation (ID)	0.573*	0.307**	0.253**	1.00

Note: **Correlation is significant at the 0.01 level (two-tailed), *Correlation is significant at the 0.05 level (two-tailed)

3.3 Regression Analysis among Variables

Further investigation using multiple regression analysis (as shown in Table 5) is also conducted. The results show that extrinsic factor working condition, payment and interpersonal relation contribute significantly ($F= 26.932$; $p= 0.000$) predicting 32.4 percent of the variations in employee's motivation. Therefore, those dimensions predict a significant change in employee's motivation.

Table 5: Summary of regression analysis

Summary		ANOVA		Dimensions	β	t	p	Collinearity Statistics	
R	ΔR^2	F	Sig.					Tolerance	VIF
0.580	0.324	26.932	0.000	Working Condition	0.100	1.364	0.175	0.783	1.277
				Payment	- 0.013	-0.176	0.861	0.809	1.236
				Interpersonal Relation	0.546	2.622	0.000	0.887	1.128

Note: ^a Predictors (constant) working condition, payment, interpersonal relation

The results further show that there is a significant relationship between interpersonal relation ($t= 0.546$; $p= 0.000$) and employees' motivation. However, there is no significant relationship between working condition ($t= 0.100$; $p= 0.175$) and payment ($t= 0.013$; $p= 0.0861$) with employee's motivation. Consequently, there is no statistical evidence to support H1 and H2. Meanwhile, there is statistically significant evidence which supports H3.

The Multiple Correlation Coefficient (R), using all the predictors simultaneously, is 58 percent and Adjusted R-Square is 32.4 percent of the variance in the employee's motivation that can be predicted from the working condition, payment and interpersonal relation. These results indicate the absence of multicollinearity in this study which is the tolerance value less than 1 and VIF value less than 10 (Pallant, 2007). From the foregoing therefore, the following of hypotheses testing are displayed in Table VIII below.

Table 6: Summary of hypotheses result

Hypotheses		Result
H ₁	There is a significant relationship between working condition and the employee's motivation.	Not Supported
H ₂	There is a significant relationship between payment and the employee's motivation.	Not Supported
H ₃	There is a significant relationship between interpersonal relation and the employee's motivation.	Supported

4. CONCLUSIONS AND RECOMMENDATIONS

Motivation is vital to create employee's willingness to give full commitment in implementing and completing his/her task. There are many extrinsic and intrinsic factors that contribute to the employee's motivation. The evidence generated from the regression analysis clearly indicated that 32.4 percent variation in employee's motivation can be explained by variation in overall extrinsic factor such as working condition, payment and interpersonal relation. In addition, interpersonal relation was revealed to be the most influence factor toward employee's motivation in the institution with correlation strength value of 0.546 and significant p-value at 0.000. Furthermore, by looking at the Beta score of the analysis 0.546, at $p < 0.05$ which explain that interpersonal relation able to increase the employee's motivation by 55%. Therefore, the management of organization should provide good platform to create an effective communication and a strong supporting group to encourage the positive feeling among colleagues.

5. DIRECTION FOR FUTURE INVESTIGATION.

The research acknowledged that motivation is significant among employees' specifically nonacademic staffs in a higher learning institution. However, this study only represented 32.4 percent toward the employees' motivation which is consider as relatively minimum. Future research will be interesting if more attempts to include the impact of other variables in the extrinsic factor such as reward not only in term of money but also in term of promotion, fame, grades, praise and intrinsic factor that potentially able to influence the employee's motivation.

Another important consideration that needed attention is to have a good definition of the population and a more appropriate sampling technique such as using probability approach. By doing this a good generalization for phenomena of the study can be more meaningful for the decision making.

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**ID089 – The Effect of Advertisement and Brand Image on Purchase Decision
(Study Case on Honda CBR150R Series Consumers in Medan City)**

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Abstract

Motorcycle is one form of land transportation that has been owned and used by many people to support their activities to meet the needs of life. This research aims to analyze the effect of advertising and brand image on the purchase decision of Honda CB150R Streetfire motorcycle series in Medan city. This research using quantitative descriptive method. Research data obtained by distributing questionnaires to 100 consumers of Honda CB150R Streetfire in Medan city with convenience sampling method. The data processed using SPSS 23.0. The results of this research reported the following multiple regression equation $Y = 3,891 + 0,151 X_1 + 0,729 X_2$. The results showed that partially advertisement and brand image have a significant effect on purchase decision of Honda CB150R Streetfire motorcycle in Medan city. The results showed that simultaneously advertisement and brand image variables have a significant effect on the purchase decision of Honda CB150R Streetfire in Medan City. Conclusion states that advertisement and brand image partially and simultaneously has an effect on purchase decision Honda CB150R Streetfire at Medan. Brand Image has dominant effect on purchase decision of Honda CBR150R Streetfire series at Medan as much as 72,9%.

Keywords: advertisement; brand image; purchase decision

1. INTRODUCTION

Along with the power of mobility and technology today, the field of transportation is also growing rapidly. One of many transportation found today is motorcycles. Motorcycles are one form of land transportation that has been owned and used by many people to support their activities to meet the needs of life.

1.1 Problem statement of the study

Life today is often associated with a lifestyle that always follows the trend. Under these conditions, brands play a role in consumer purchasing decisions. Brand image is a representation of the overall perception of the brand formed on the minds of consumers based on information and experience of a particular brand.

In addition to brands, other factors that influence purchasing decision is advertising. Advertising is one of the marketing communications used to introduce products to the target market and can also be a differentiator with competitors. Nowadays advertisement becomes one of the most important promotional instruments, especially for companies that produce goods or services aimed at the public.

Currently a lot of motorcycle brands that appear like Honda, Yamaha, Suzuki, Kawasaki, TVS, and many more. Even so, in everyday activity many people use to called 'Honda' although the motorcycle they used are another brands (Yamaha, Suzuki, Kawasaki, and so on). For Honda

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motorcycle ads are also very common to see both in print or electronic media. But Honda motorcycles ads like Streetfire's CB150R series ads tend to under-explain their products.

In addition, the number of sales of Honda CB150R Streetfire in three consecutive years (2014-2016) which tend to up and down. This indicates that the delivery of product information through advertising has not been well absorbed by the public. Here's a comparison of sales data of Honda CB150R Streetfire motorcycles with Yamaha Vixion.

Year	Honda CB150R Streetfire(unit)	Yamaha Vixion (unit)
2014	172.445	368.033
2015	112.615	275.261
2016	152.263	153.128

Although Honda's brand image is already strong among the public, but for sales of motor sport like the Streetfire CB150R type is still less than its rival Yamaha Vixion.

1.2 Literature review

Advertisement

Kotler dan Keller (2012:500) explain that Advertisements are all forms of nonpersonal presentation and promotion of ideas, goods or services through clear sponsors through print media (newspapers and magazines), broadcast media (radio and television), network media (telephone, cable, satellite), and electronic media (voice recordings, radio recordings, CD-ROMs, web pages) and exhibition media (Billboard, road signs and posters).

Kotler also say that, the purpose of the ad can be classified according to whether the goal is to inform (informative advertising), persuade (persuasive advertising), remind (reminder ads) or strengthen (reinforcement ads).

- a) *Informative advertising*
Intended to create awareness and knowledge of new products or new features of existing products.
- b) *Persuasive advertising*
Intended to create likes, preferences, beliefs, and purchases of products and services. Persuasive ads use comparative advertising, which makes explicit comparisons between the characteristics of two or more brands.
- c) *Reminder Ads*
Intended to stimulate the purchase of products and services back.
- d) *Reinforcements Ads*
Intended to convince buyers now that they have made the right choice.

Kotler (2009) media planning must know the capabilities of major media types to generate reach, frequency and impact. Each media has its advantages and limitations. The advertising media in question is television, radio, newspapers, magazines, and media outside the community.

Brand Image

Suyanto (2010) said that "Brand image consists of knowledge and trust in brand traits, brand usage consequences, and appropriate utilization situations in addition to evaluations, feelings and emotions associated with a brand." According Suyanto (2010), the main dimensions that affect and shape the image of a brand is contained in the following:

- a) *Brand Identity*
Brand identity is a physical identity associated with a brand or product so that consumers easily recognize and distinguish it with other brands or products.
- b) *Brand Personality*
Brand personality is the distinctive character of a brand that shapes a particular personality just like a human being, so that the consumer audience easily distinguishes

it from other brands in the same category.

c) *Brand Association*

Brand associations are specific that deserve or always be associated with a brand, can arise from a unique offering of a product, a recurring, and consistent activity.

d) *Brand attitude*

Brand attitude and behavior is the attitude or behavior of communication and brand interaction with consumers in offering benefits and benefits.

e) *Brand benefit*

Brand benefit and competence are the values and distinctive advantages offered by a brand to consumers that make consumers feel the benefits because their needs, desires, dreams and obsessions are realized by what is offered. Value and benefits here can be functional, emotional, symbolic and social.

Purchase Decision

Lamb (2009) explain that Consumer behavior describes how consumers make purchase decision and how they use and dispose of the purchased goods or services. Based on Kotler (2009), the researcher of consumer purchasing decision indicator is product form, consumer preference, product attractiveness, and product price.

Based on the above explanation, it can be described a frame of mind that functions as a plumbing prosecutor and the basis of this study can be described as follows:

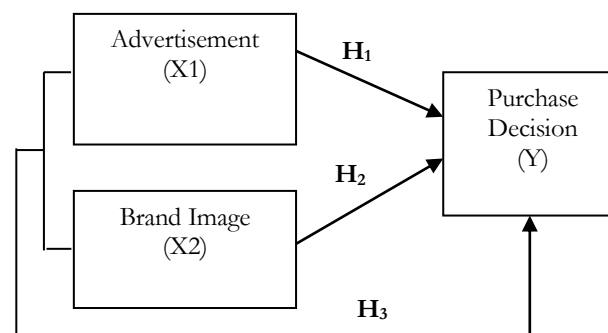


Figure 1: Conceptual Framework

In order to reveal the influence of advertisement and brand image on purchase decision, this study tests the following hypotheses:

H_1 : Advertisement has positive and significant effects on purchase decision.

H_2 : Brand Image has positive and significant effects on purchase decision.

H_3 : Advertisement and brand image has positive and significant effects on purchase decision.

2. RESEARCH METHOD

This research using quantitative descriptive research methods where this method aims to describe the characteristics of a state or object of research conducted through data collection and data analysis and statistical testing with software SPSS version 23.0.

2.1 Population and Sample

Populations in this research are Medan city society with criteria is a male gender and using Honda CB150R Streetfire in age range 20 - 44 years old.

Sample is "part of the number and characteristics possessed by the population" Sugiyono (2012: 149). Sampling is done by convenience sampling technique that is sample which can be found easily, as many as 100 respondents.

3. FINDING AND DISCUSSION

Based on the output of SPSS, it is known that multiple linear regression analysis equation in this research is:

$$Y = 3,891 + 0,151 X_1 + 0,729 X_2$$

3.1 T- test / Partial

Based on SPSS output result, can be seen that the t value of advertisement (X_1) is 2.091 which is bigger than the value of ttable ($2,091 > 1,984$) and significant value is $0,039 < 0,05$ means advertisement has positive and significant effects on purchase decision of Honda CB150R Streetfire in Medan city (Hypotheses 1 accepted). t value of brand image (X_2) is 9,860 which is bigger than the value of ttable ($9,860 > 1,984$), it means that brand image has positive and significant effects to purchase decision of Honda CB150R Streetfire in Medan city (Hypotheses 2 accepted).

3.2 F test (Simultaneously)

Based on SPSS output result, F value in column F is equal to 72,492 with a significance value is 0.000. Based on hypothesis testing F value is bigger than Ftable ($72,492 > 3,09$) and significance value is $0,000 < 0,05$. This indicates that the advertisement and brand image has positive and significant effects on the decision of purchase of Honda CB150R Streetfire in Medan city (Hypotheses 3 accepted).

From the overall results it can be concluded that independent variables (advertisement and brand image) has a significant influence simultaneously and partially on Purchase Decision. The value of coefficient of determination can be seen in the column Adjusted R square of 0.591 means 59.1% purchase decision variables can be explained by advertising variables and brand image. While the remaining 40.9% other explained by other variables that are not examined in this study. Brand Image is the dominant variable that has significant influence on Purchase Decision since it has the greatest β coefficient and t value.

4. DISCUSSION

The result of t test (partial test) states that advertisement has positive and significant effect on purchase decision, This indicates that the ads produced have been able to attract the attention of its customers. The results of this study are in line with Erick Devry Sumarno (2011), Zimri Remalya Mawara (2013), and Mario Mandagie (2014) studies, that advertising influences purchasing decisions.

The result of t test (partial test) also states that brand image variable has positive and significantly effect purchase decision. This is due to consumers in buying and consuming something not just expecting just goods, but there is something else. Brand image that has been built by the company Astra Honda Motor embedded consumer mind as a motorcycle economical, friendly environment, and so on. The results of this study are in line with Erick Devry Sumarno (2011), Zimri Remalya Mawara (2013), and Mario Mandagie (2014) studies, that brand image influences purchasing decisions.

Based on these results can be concluded that simultaneously advertisement and brand image has positive and significantly effects the purchase decision of Honda CB150R Streetfire motorcycles in the city of Medan. Brand image and advertisement have strong positive

influence and significant relationship with Consumer buying behavior (Malik et.al, 2013). This is reinforced by the coefficient of determination seen from the R value of 0,591.

5. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Based on the calculation of multiple linear regression analysis, it can be concluded that:

1. Partially, advertisement has positive and significant effect on purchase decision of Honda CB150R Streetfire in Medan city. This means that a communicative and interesting advertising about Honda CBR150R can improve purchasing decisions by 15.1%.
2. Partially, brand image has positive and significant effect on purchase decision of Honda CB150R Streetfire in Medan city. This means that an increase in brand image of Honda CBR150R can improve purchasing decisions by 72,9%.
3. Simultaneously, advertisement and brand image effects 59,1% on purchase decision, the rest influenced by other variable not mentioned in this research.

Suggestions

Based on the conclusions above, can expressed some suggestions which are expected to be useful for the company as well as for others. The advice given, among others:

1. The advertisements shown for the Honda CB150R Streetfire motorcycle products should be further enhanced in order to attract more attention from potential customers. Because it is not impossible consumers will feel bored with the type of ads that already exist.
2. Brand image that has been built by Astra Honda Motor (AHM) companies can attract consumer attention and can affect consumers by 72.9%. Therefore, AHM companies must maintain the brand image that is already embedded in the minds of consumers.
3. For the next researcher, to increase the number of samples or respondents who studied and also pay attention to other factors that exist.

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**ID090 - Neural Network Assessment Variable Poverty Priorities for Optimizing Poverty
Reduction Solutions for Sustainable Development
- Sustainable Development Objectives**

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Abstract

Poverty is a multi-dimensional problem because it deals with the inability of economic, socio-cultural, political and participation access in society. The forms of poverty that exist in Indonesia as well as various factors causing it, of course, greatly affect the formulation of policies made. The formulation of the problem in this study is the prediction of the number of poor people in the year 2017 and the selection of the most important variables of poverty that must be optimized as Poverty Reduction Handling Solutions In Improving Sustainable Development or Sustainable Development Goals (SDG) Data used in this paper is data secondary data that is population poverty from 2012 until 2016. The method used is neural Network. Variable used in this research is Income Per recipients of BPJS, Insurance, Illiterate, Unemployment, Disability (disability), poverty result From this research is 1. Prediction Number of Poor population in Year of 2017 is equal to 8.48% from previous year is 8,69% The most important poverty variables that must be optimized as Poverty Reduction Handling Solutions in Sustainable Development Goals (SDG) is the first order is illiterate with a value of 0.7754 next second sequence is Unemployment with a value of 0.7638 then the third peringkat is Insurance with value 0.7628 followed by income per capita with a value of 0.7595 in fourth. Next the fifth is the BPJS with the last 0.7577selanutnya value is Disabilitas diurutkan sixth.

Keywords: BPJS; neural network; insurance; SDG; income

1. INTRODUCTION

Poverty is a multi-dimensional problem because it deals with the inability of economic, socio-cultural, political and participation access in society. The forms of poverty that exist in Indonesia as well as various factors causing it, of course, greatly affect the formulation of policies made. Various policies and programs are perceived to be less effective in reducing the number of people living below the poverty line, as evidenced by the trend of increasing the number of poor people from time to time. Of course, the formulation of policies and programs needs to be addressed and made policy formulation in accordance with the phasing, in formulating the policy must be considered and understood the characteristics of poverty in each region. (Nurwati, 2008). Since 2011, the poverty reduction has slowed, in absolute terms decreasing by less than 1 million poor people per year. This is because the poverty condition has now reached a chronic stage and macroeconomic conditions are not yet optimal. Disparities between provinces still occur with provincial poverty rates in Eastern Indonesia relatively higher than in Western Indonesia. On the other hand, GINI Coeficient continues to increase to reach 0.42 in 2013 (Iryanti, 2014: 4). Because it is required a study or research

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analysis using the method of Neural Network Backpropagation to predict the number of poor people in 2017 and the selection of variables the most important poverty that should be optimized as a Poverty Reduction Handling Solution in the Enhancement of Sustainable Development or Sustainable Development Goals (SDG).

1.1 Problem statement of the study

The Problem Formulation on This Work is:

- i. How to Predict the Number of Poor People in the Year 2017?
- ii. How to Select The most important poverty variables that should be optimized as Poverty Reduction Handling Solutions in the Enhancement of Sustainable Development or Sustainable Development Goals (SDG)?

1.2 Literature review

Table 1: Research Data

NO	Tahun	X1 (Penghasilan /pendapatan per kapita)	X2(BPJS) jiwa	X3 (Asuransi)	X4(Tidak Sekolah (Buta Huruf))	X5(Pengangguran)	X6 (Cacat)	X7 Kemiskinan
1	2016	47,96 juta	172,9 juta jiwa.	19,1 juta jiwa	17,09%	7.031.775 juta jiwa	8,6 %	8.69%
2	2015	45,2 juta	155 juta jiwa	16,60 juta jiwa	17,77 %	7.560.822 juta jiwa	9,4 %	8.45%
3	2014	41,9 juta	116,12 juta jiwa	10,42 juta jiwa	18,37%	7.244.905 juta jiwa	9,5 %	8.25%
4	2013	38,4 juta	111,6 juta jiwa	8,94 juta Jiwa	22,84%	7.410.931 juta jiwa	9,9 %	8.26%
5	2012	35,1 juta	98,56 juta jiwa	6,24 juta jiwa	26,23%	7.344.866 juta jiwa	9,95 %	7,76%

Urgency The problem in this study focuses on the subject of one of the 17 Pillars of SDGs 2030 "That is" Without poverty "where it must be done Alleviation of all forms of poverty in all places, so the problem of Poverty must be analyzed from all variables then determined which variable is the most dominant and becomes a handling urgency to optimize poverty alleviation solutions and also in terms of predicting the number of poor people by 2017. If the most important variables have been determined this will be an input and solution to the government and all parties to jointly make efforts to alleviate poverty starting from optimize the most urgent variables.

1.3 Research Purposes

The purpose of the ideas raised in this study is as follows:

- i. To view and analyze the Prediction of the Poor Population in 2017?
- ii. To analyze the most important variables of poverty that must be optimized as Poverty Reduction Handling Solutions for Sustainable Development or Sustainable Development Goals (SDG).

Problem exposure

The Problem of Poverty Eradication there are variables that become the factor that someone is said to be poor. The variables of poverty as quoted from the Central Bureau of Statistics (BPS 2011), among others as follows: 1. Inability to meet basic consumption needs (clothing, food and boards). 2. Lack of access to other basic living needs (health, education, sanitation, clean water and transportation). The absence of future guarantees (due to the absence of investment for education and family) Vulnerability to individual and mass shocks. Low quality of human resources and limited natural resources. Lack of appreciation in social activities of society. Lack of access to sustainable employment and livelihoods. Inability to strive for

physical or mental disability. Social incapacity (abandoned children, women victims of domestic violence, poor widows, marginal and remote groups).

Data Processing

The Artificial Neural Network architecture used in this case is the backpropagation algorithm network, which consists of:

- The input layer with 7 nodes is ($x_1, x_2, x_3, x_4, x_5, x_6, x_7$).
- The hidden layer with the number of vertices specified by the user is one node or one hidden with two neurons ie (y_1, y_2).

Output layer with 1 node is the prediction accuracy of the added value of a product (Z). Network architecture can be seen as in Figure 1 below:

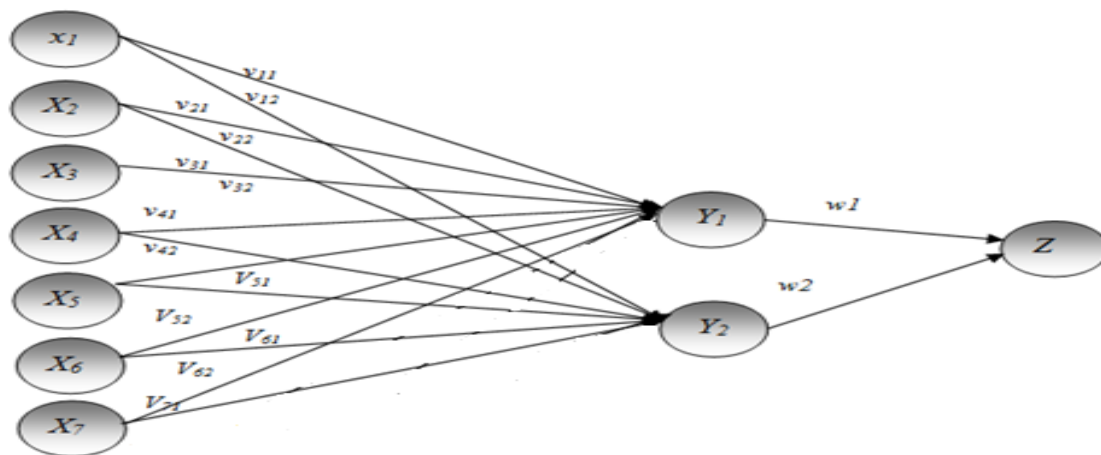


Figure 1: Backpropagation Network Architecture

Information

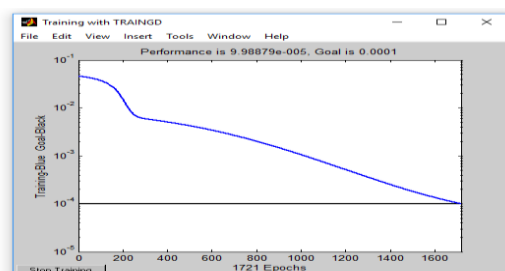
X = Inputs, V = Weights in the hidden layer, W = Weights in the output layer, V_n = Number of processing units in hidden layer, B = Bias in hidden layer and output layer, Y = Output result, $J = 1 \text{ s} / d 7$. $Y_d = 0$

Methods of data analysis

For input data values and target variables are replaced with values obtained based on BPS data from 2012 to 2016 Indonesia. The desired output of data processing is predicted by the Poor People in 2017 and the most potential variable for optimizing poverty alleviation solutions.

Ideas raised

In this study conducted research and analysis so that the results of variables can be measured so that the solution obtained can be implemented optimally. In Neural network Method Backpropagation algorithm is measured with three architectures. After 3 Architecture in practice and the test is the architecture, 7-7-1, 7-5-3-1, 7-9-1, obtained the best architecture is 7-7-1 with the Epoch 1721.



Model	7-7-1	7-5-3-1	7-9-1
Epoch	1721	18854	1654
MSE Pelatihan	0,0001007096	0,000109978	0,00009756664
Tingkat Kebenaran	28/30	18/21	16/21
Persentase Keakuratan	93,0%	85%	76%
MSE Pengujian	0,008677612	0,092772723	0,06302726
Tingkat Kebenaran	4/5	9/15	10/20
Persentase keakuratan	80%	60%	50%

Hasil Prediksi Penduduk Miskin 2017 dan prediksi Variabel terpenting sebagai solusi pengentasan kemiskinan Setelah pola terbaik dari tiga arsitektur yaitu , 7-7-1, 7-5-3-1, 7-9-1 yang telah dilatih dan diuji telah didapatkan yaitu pola 7-7-1 dengan tingkat keakuratan training 93 %. Langkah selanjutnya adalah memprediksi jumlah penduduk miskin tahun 2017 dari data 2012 sampai data 2016. Maka dari hasil prediksi didapatkan hasil sebagai berikut : Tahun 2017 = $0.7754 (8,69 \% - 7,76 \%) + 7,76 \% = 8.48 \%$. dimana: x_i = Jumlah penduduk Miskin, y = Hasil output pengolahan data 0,7754, x_{min} = Data dengan nilai minimum 7,76 %, x_{max} = Data dengan nilai maksimum 8,69 % . Jadi dengan keseluruhan data di atas dapat diprediksi bahwasannya prediksi penduduk miskin 2017 adalah 8,48% dari seluruh penduduk indonesia.

2. METHOD AND MATERIAL

Predicted Results of the Poor in 2017 and predictions the most important variable as a poverty alleviation solution. After the best pattern of the three architectures that is, 7-7-1, 7-5-3-1, 7-9-1 which have been trained and tested has been obtained that is 7-7-1 pattern with 93% training accuracy level. The next step is to predict the number of poor people in 2017 from 2012 data to 2016 data. So from the prediction results obtained results as follows: Year 2017 = $0.7754 (8.69\% - 7.76\%) + 7.76\% = 8.48\%$. where: x_i = Number of Poor population, y = Result of data processing output 0,7754, x_{min} = Data with minimum value 7,76%, x_{max} = Data with maximum value 8,69%. So with the overall data above can be predicted that the prediction of poor people 2017 is 8.48% of the entire population of Indonesia.

3. ANALYSIS AND RESULTS

From Output Results that have been obtained then the results of data processing Neural Network Backpropagation of the five poverty variables that become the sample obtained Illiterate became the highest variable, next is the Unemployment, Insurance, Income per capita, Beneficiary BPJS, and disability. So the handling that must be done if you want to eradicate poverty faster is to organize a program for literacy eradication. One of the illiterate programs that can be applied is the program of illiteracy eradication strategy through the use of family-based metastasis techniques (mariyono, 2016: 55-66), then the Ready Writing program: Eradicating Illiteracy Through Unique and Fun Arisan Methods (kurniawati, 2014 : 1-9). This literacy program can be implemented by fellow citizens.

Table 1: Table result

No	Input	Performance	Output	Rangking	Epoch
1	Per Capita Income	0.9914	0.7595	4	0.0116
2	Beneficiary of BPJS	0.2449	0.7577	5	0.0004
3	Insurance	0.7197	0.7628	3	-0.0160
4	Illiterate	0.6813	0.7754	1	-0.0043
5	Unemployment	0.8737	0.7638	2	-0.0057
6	Disability	0.4043	0.7342	6	0.0126

4. DISCUSSION

Search results from the following results:

1. The predicted number of poor people in the year 2017 is 8.48% from the previous year is 8.69%
2. The most important variables that must be optimized as Poverty Reduction Handling Solutions in the Enhancement of Sustainable Development Or Sustainable Development

Objectives (SDG) is the first order is very large Letter with the value of 0.7754 next is the conversion with a value of 0.7638 next peringat Insurance money with a value of 0.7628 followed by income per capita with a value of 0.7595 in fourth. Furthermore, the sequence is BPJS with the value of 0.7577 the last one is Disabilitas diurutkan sixth.

3. Suggestions

It is hoped to include works that become inputs for the Government to be cultivated and carried out in all places not only in urban areas but also in the regions due to social and community responsibilities.

5. CONCLUSIONS AND RECOMMENDATIONS

Search results from the following results:

1. The predicted number of poor people in the year 2017 is 8.48% from the previous year is 8.69% The most important variables that must be optimized as Poverty Reduction Handling Solutions in the Enhancement of Sustainable Development Or Sustainable Development Objectives (SDG) is the first order is very large Letter with the value of 0.7754 next is the conversion with a value of 0.7638 next peringat Insurance money with a value of 0.7628 followed by income per capita with a value of 0.7595 in fourth. Furthermore, the sequence is BPJS with the value of 0.7577 the last one is Disabilitas sixth.

2. Suggestions

It is hoped to include works that become inputs for the Government to be cultivated and carried out in all places not only in urban areas but also in the regions due to social and community responsibilities.

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