Chapter 5

Research result and analysis

This chapter presents the finding of the study based on the inputs derived from the statistical data. The presentation of the research result will be done in steps based on all the hypothesis forwarded in this study. The narration of the research result will focus not only on testing the hypothesis but also to study the relationship between the various variables involves in this particular study.

5.1. Result of testing Hypothesis 1:

Organization Culture is influenced by such norms as risk taking, rewards for change, openness, common goals and autonomy.

The first hypothesis concerns the relation between organization culture as the dependent variable, and five other independent variables namely risk, rewards, openness, common goals and autonomy.

a) Estimated Correlation

Organization culture is estimated to have a positive relation to risk taking. This means that the perception over the factor of risk taking reflects the kind of culture that exist in the organization. In other words if the perception over the element of risk is dominantly negative, then there is
also a higher possibility for members of the organization to adopt and reflect a negative attitude towards this factor, example like taking an avoidance kind of attitude to risk taking.

The **reward** factor is also expected to have a positive relation to organization culture. Theoretically, the reward factor is assumed to be a strong motivating instrument thus capable of creating positive effect in its presence or a negative effect in its absence. As such, an organization that is able to provide this factor accordingly, will most likely be able to gain a positive 'appreciation' by its members and this effect will reflects in the members attitude towards their work and responsibility.

**Openness** is another factor that is estimated to have positive relation to organization culture. In today's modern style of management where the two ways communication between superior and subordinate is very much encouraged, it is assumed that an organization that is able to avoid barriers communication among members in the organization will perform better thus possibly create a better working culture. However, for organization which do not practice openness in its management style will likely to have an individualistic and self-confined style of working culture. This is when for example, a positive initiation by a staff to assist one another is misunderstood as interference or thing could even be worst if
the management style is so stiff that you are not even able to question your superior's directive but "just do it."

The above discussion led to the next factor which is common goal. It is also estimated there is a positive relation between this factor to organization culture. An organization that visualized clear goal(s) and encourages teamwork towards achieving the targeted goal(s), practice good culture. However for an organization which fail to inculcate this factor would have a more disorganized members because each and every one will tend to care less and be self-confined to own scope of work only.

The last factor is autonomy which in this study it is also estimated to have a positive relation to organization culture. The issue of autonomy is very related to delegation of power or authority. In a modern organization of today, where the customer's satisfaction is of top priority, it is important that service is provided with ease and speed. Logically this would only be possible the assigned individual to serve the customer has the autonomy to make decision with ease and less reference to higher authority. Within the public organization, this is where part of the term "being less bureaucratic" applies. An organization that has so much strata of autonomy to get things done will be slow in its work process and will not only frustrate the customer but also members within the organization itself.
b) **Model analysis**

The organization culture being the dependent variable is seen to contain ingredients of risk, reward, common goal, openness and autonomy (all of which are independent variables). Mathematically, the formula is seen as follows:

\[
\text{Organization culture} = -\beta_0 + \beta_1 \text{Risk} + \beta_2 \text{Reward} + \beta_3 \text{Openness} + \\
\beta_4 \text{Common goal} + \beta_5 \text{Autonomy}
\]

\[
\therefore \text{Organization culture} = -1.232 - 1.246(\text{Risk}) + 0.879(\text{Reward}) + \\
0.878(\text{Openness}) + 1.031(\text{Common goal}) + \\
1.298(\text{Autonomy})
\]

c) **Model evaluation based on statistical criterion**

Evaluation is done based on statistical theory through the parameters value run by the computer output and few other tests.

i. **The R – Square test.**

From the computer output, the R – Square value = 0.995. Therefore it can be concluded that 99.5% of the dependent variable which is organization culture have been explained by the independent variables which are risk, rewards, openness, common goal and autonomy. This thus
confirmed the theoretical explanation that factors as described in the independent variables have an impact on organization culture.

ii. Statistical test for parameters

(a) $t$ - test for risk taking ($\beta_1$)

$H_o$: There is no linear relation between risk taking and organization culture.

$H_a$: There is a linear relation between risk taking and organization culture.

* at the coefficient level of $\alpha = 0.05$

Based on the result from the computer output, $t^* = 17.696$ and $t_{0.025,29} = 2.045$.

Therefore it is clear that the value of $t^* > t$. As such, the alternative hypothesis is accepted whereas the null hypothesis is rejected. Therefore, based on the test result, it can be concluded that there is enough prove to say that a linear relation exist between organization culture and risk taking at the coefficient level $\alpha = 0.05$.

(b) $t$ - test for rewards for change ($\beta_2$)

$H_o$: There is no linear relation between rewards for change and organization culture

$H_a$: There is a linear relation between rewards for change and organization culture

*at the coefficient level of $\alpha = 0.05$
Based on the result from the computer output, $t^* = 8.772$ and $t_{0.025,29} = 2.045$. Therefore it is clear that the value of $t^* > t$. As such, the alternative hypothesis is accepted whereas the null hypothesis is rejected. Therefore, based on the test result, it can be concluded that there is enough prove to say that a linear relation exist between organization culture and rewards for change at the coefficient level $\alpha = 0.05$.

(c) $t - \text{test for openness (} \beta_3 \text{)}$

Ho: There is no linear relation between openness and organization culture

Ha: There is a linear relation between openness for change and organization culture

*at the coefficient level of $\alpha = 0.05$

Based on the result from the computer output, $t^* = 5.951$ and $t_{0.025,29} = 2.045$. Therefore it is clear that the value of $t^* > t$. As such, the alternative hypothesis is accepted whereas the null hypothesis is rejected. Therefore, based on the test result, it can be concluded that there is enough prove to say that a linear relation exist between organization culture and openness at the coefficient level $\alpha = 0.05$.

(d) $t - \text{test for common goal(s) (} \beta_4 \text{)}$

Ho: There is no linear relation between common goal(s) and organization culture

Ha: There is a linear relation between common goal(s) and organization culture

*at the coefficient level of $\alpha = 0.05$
Based on the result from the computer output, \( t^* = 3.905 \) and \( t 0.025,29 = 2.045 \). Therefore it is clear that the value of \( t^* > t \). As such, the alternative hypothesis is accepted whereas the null hypothesis is rejected. Therefore, based on the test result, it can be concluded that there is enough prove to say that a linear relation exist between organization culture and common goal(s) at the coefficient level \( \alpha = 0.05 \).

(d) \( t \)– test for autonomy (β5)

Ho: There is no linear relation between autonomy and organization culture

Ha: There is a linear relation between autonomy and organization culture

*at the coefficient level of \( \alpha = 0.05 \)

Based on the result from the computer output, \( t^* = 12.142 \) and \( t 0.025,29 = 2.045 \). Therefore it is clear that the value of \( t^* > t \). As such, the alternative hypothesis is accepted whereas the null hypothesis is rejected. Therefore, based on the test result, it can be concluded that there is enough prove to say that a linear relation exist between organization culture and autonomy at the coefficient level \( \alpha = 0.05 \).

**iii. the F-test**

From the computer analysis, it is found that \( F^* = 897.987 \) and \( F 0.05, 5, 24 = 2.62 \). Given the fact that \( F^* > F \), it can be conclude that the whole regression for the hypothesis are significant. If there is a correct
perception and manipulation of all the independent variables described here, in the management style of the organization, then it can be said that the organization practice positive organization among its members. This again will most likely foresee the tendency for such an organization to be dynamic towards changes and make allowance for creativeness and continuous learning as some of its feature.

5.2. Result of testing hypothesis 2:

**Members of an organization have the tendency to inherit the existing organization culture in the organization and are not dynamic in attitudes towards change.**

The second hypothesis actually intends to look at the bond between members of an organization onto the cultural norms that prevails in the organization where they are working. For the purpose of testing this hypothesis, a frequency test was run onto the pattern of responds given by all the respondents. As a result, the following was found as shown in Table 5.1 below:

<table>
<thead>
<tr>
<th>Group classification</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid percent</th>
<th>Cumulative percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>22</td>
<td>73.3</td>
<td>73.3</td>
<td>73.3</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>26.7</td>
<td>26.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 5.1 Frequency test for relating to the tendency for members of an organization to inherit existing organization culture and are not dynamic to changes
The analysis was performed by means if dividing the whole sample into two main group namely Group 1 for those that have the tendency to inherit or at least follow the existing cultural norms in the organization, and Group 2 for those who would go against or question, example, over doubtful matters which he or she thinks needs to be clarified before agreeing or even make daring gestures for change.

Based on the above findings, it can be seen that there is a clear pattern indicating that a majority of twenty-two respondents or 73.3% of them fall within group 1 whereas eight other respondents at a rate of 26.7% come under group 2. Again based on this output, the hypothesis that members of an organization have the tendency to inherit the existing culture in the organization and are not dynamic in attitudes towards change is accepted.

5.3. Result for testing hypothesis 3:

Factors such as decision maker's type of personality, type of decision need to be made (problem), attitude towards making decision and decision maker's potential for dissonance, are influential onto the decision making behavior.

This hypothesis focuses on studying if there is any relation between decision making as the dependent variable, and the other four independent variables as have been mentioned. Theoretically, these independent variables have been identified by experts as possibly the influencing factors that can affect a person's decision making behavior.
a) **Estimated Correlation**

Decision making is estimated to have a positive relation to **attitude**. This means that a person’s attitude towards his or her responsibility of having to make decision would reflect in the quality of the decision made. For someone who likes the challenge in decision making, he or she would presumably try to make the best out the decision made. However for those who dislike the challenge, then there would be a tendency to avoid such a condition or if forced to do so, would probably make an estimation out of the expected result from the decision made.

Considering the fact that majority of the task carried out by public executives involve assorted responsibilities such as supervising and monitoring, reporting and advising, all these responsibilities involve to a certain extent of having to a good and reliable judgement in order to come up with an equally reliable decision. As a public executive the final decision may not be his or her responsibility but again the kind of recommendation or advice that is given to the superior for the final decision to made, is still partly a situation that he or she has to be accounted for. Actually, having to make decision is not an optional area for a public executive because whether you like or dislike the task, in most cases it is an indirect (if not direct) commitment that you have to do, at least when advising and making recommendation to the superior. So at
this juncture, the attitude factor gives an important impact over the responsibility of having make decision.

The decision making behavior is also expected to have a positive relation to the type of decision need to be made. The assumption is that the tougher the decision the less willing a person would want to face it. Theoretically, there are two main types of decision which is termed as the programmed and non-programmed decision. The programmed decision is said to have more simplicity in its nature due to the fact that it is a pre-guided decision. Furthermore the nature of the problem categorized under the programmed decision is one which common. As for non-programmed decision, it is just the opposite and it demands the creativity of the decision maker to come up with reliable and good decision. Up to this point, it is interesting how would the public executive react to both type of decisions. Whether the public executives are equally exposed to both type of decisions or just to a programmed type of decision would explain their behavior in decision making.

**Personality type** is another factor that is estimated to have positive relation to decision making behavior. Theory says that there are two types of personalities that can influence a person’s decision making behavior namely the internal and the external of a personality. The first type tends to be more self confidence and innovative in their tasking whereas the
latter tends to take the sideline position and have more reliance to luck and fate in their undertaking. So at this point the type of personality that prevails can be an influential factor to a person's decision making behavior.

The last factor is **potential for dissonance** which in this study it is also estimated to have a positive relation to decision making behavior. Potential for dissonance actually focuses level of confidence that a person has over the decision that he has made. Theoretically, it is assumed that under certain situation, for example psychological instability that may be caused by conflict of values, the importance of the decision that need to be made, the level of confidence that one has, all these could caused dissonance. The level of its(dissonance) existence can have an influential effect onto a person's decision making behavior such as being doubtful and uncertain in most cases.

b) **Model analysis**

Decision making behavior being the dependent variable is seen to contain ingredients of attitude, type of decision, type personality and potential for dissonance (all of which are independent variables). Mathematically, the formula is seen as follows:

\[
\text{Decision making behavior} = -\beta_0 + \beta_1(\text{attitude}) + \beta_2(\text{TD}) + \beta_3(\text{TP}) + \beta_4(\text{PFD})
\]
\[ \text{organization culture} = 15.580 + 0.961(\text{attitude}) + 2.027(\text{TD}) + 0.108(\text{TP}) + 0.331(\text{PFD}) \]

c) Model evaluation based on statistical criterion

Evaluation is done based on statistical theory through the parameters value run by the computer output and few other tests.

i. The R – Square test.

From the computer output, the R – Square value = 0.774.

Therefore it can be concluded that 77.4% of the dependent variable which is decision making behavior have been explained by the independent variables which are attitude, type of decision, type of personality and potential for dissonance. This thus confirmed the theoretical explanation that factors as described in the independent variables have an impact on decision making behavior.

ii. Statistical test for parameters

(a) t – test for attitude (β1)

Ho: There is no linear relation between attitude and decision making behavior.

Ha: There is a linear relation between attitude and decision making behavior.

* at the coefficient level of \( \alpha = 0.05 \)
Based on the result from the computer output, \( t^* = 4.384 \) and \( t \ 0.025,29 = 2.045 \). Therefore it is clear that the value of \( t^* > t \). As such, the alternative hypothesis is accepted and the null hypothesis is rejected. Therefore, based on the test result, it can be concluded that there is enough prove to say that a linear relation exist between decision making behavior and attitude at the coefficient level \( \alpha = 0.05 \).

(b) \( t \) test for type of decision \((\beta 2)\)

Ho: There is no linear relation between type of decision and decision making behavior

Ha: There is a linear relation between type of decision and decision making behavior

*at the coefficient level of \( \alpha = 0.05 \)

Based on the result from the computer output, \( t^* = 6.009 \) and \( t \ 0.025,29 = 2.045 \). Therefore it is clear that the value of \( t^* > t \). As such, the alternative hypothesis is accepted and the null hypothesis is rejected. Therefore, based on the test result, it can be concluded that there is enough prove to say that a linear relation exist between decision making behavior and type of decision at the coefficient level \( \alpha = 0.05 \).

(c) \( t \) test for openness \((\beta 3)\)

Ho: There is no linear relation between type of personality and decision making behavior

Ha: There is a linear relation between type of personality and decision making behavior

*at the coefficient level of \( \alpha = 0.05 \)
Based on the result from the computer output, $t^* = 0.401$ and $t_{0.025,29} = 2.045$. Therefore it is clear that the value of $t^* > t$. As such, the alternative hypothesis is accepted and the null hypothesis is rejected. Therefore, based on the test result, it can be concluded that there is enough prove to say that a linear relation exist between decision making behavior and type of personality at the coefficient level $\alpha = 0.05$.

(d) $t$– test for potential for dissonance ($\beta^4$)

Ho: There is no linear relation between potential for dissonance and decision making behavior

Ha: There is a linear relation between potential for dissonance and decision making behavior

*at the coefficient level of $\alpha = 0.05$

Based on the result from the computer output, $t^* = 0.917$ and $t_{0.025,29} = 2.045$. Therefore it is clear that the value of $t^* < t$. As such, the alternative hypothesis is rejected and the null hypothesis is accepted. Therefore, based on the test result, it can be concluded that there is not enough prove to say that a linear relation exist between decision making behavior and potential for dissonance at the coefficient level $\alpha = 0.05$. 

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iii. the F-test

From the computer analysis, it is found that $F^* = 21.413$ and $F_{0.05, 4, 25} = 4.22$. Given the fact that $F^* > F$, it conclude that the whole regression that performed onto the hypothesis are significant.

5.4. Result of testing hypothesis 4:

Public executives are more of having external personality type and are incline to systematic thing rather having internal personality type and adopt intuitive thinking approach in making decision.

The fourth hypothesis intends to look at the type of possible decision makers that are mostly found in a public organization. The classification of these decision makers would be based on theories as stated by Rotter on internal and external type of personality, and McKenney, Keen and Morten on systematic and intuitive thinkers. For the purpose of testing this hypothesis, a frequency test was run onto the pattern of responds given by all the respondents. As a result, the following was found as shown in Table 5.2 below:

<table>
<thead>
<tr>
<th>Group classification</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid percent</th>
<th>Cumulative percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>19</td>
<td>63.3</td>
<td>63.3</td>
<td>63.3</td>
</tr>
<tr>
<td>2</td>
<td>11</td>
<td>36.7</td>
<td>36.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
The analysis was performed by means if dividing the whole sample into two main
group namely Group 1 for those representing the external type of personality,
and Group 2 for those representing the internal type of personality.

Based on the above findings, it can be seen that there is a clear pattern
indicating that a majority of nineteen respondents or 63.3% of them fall within
group 1. whereas eleven other respondents at a rate of 36.7% come under
group 2. Again based on this output, the hypothesis that public executives are
more of having external personality type and are incline to systematic thinking
rather than having internal personality type and adopt intuitive thinking approach
in making decision is accepted.

5.5. Result testing hypothesis 5:

There is a strong impact of organization culture on the decision
making behavior of public executive thus showing a significant
correlation.

The final hypothesis is to see if there is any correlation between organization
culture and decision making behavior. The hypothesis used for the purpose of
this testing is as follows:

$H_0$: There is no significant correlation between organization culture and
decision making behavior.

$H_a$: There is a significant correlation between organization culture and
decision making behavior.
A Chi-Square test was run through the computer as the basis of analysis and the following result was found as shown in Table 5.3.

Table 5.3. Correlation between organization culture and decision making behavior

<table>
<thead>
<tr>
<th>Chi-Square value</th>
<th>df</th>
<th>P-value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.903</td>
<td>1</td>
<td>0.028</td>
<td>Significant</td>
</tr>
</tbody>
</table>

The result of the analysis showed that the null hypothesis is rejected because the P-value is less than $\alpha = 0.05$. It also concludes that the alternative hypothesis is accepted.

5.6. Conclusion.

Based on the whole research analysis done throughout the five main hypothesis, it can be concluded that the theoretical background as quoted in the literature review of this study is true and is applicable within our local setting. At the same time, it is also of equal interest to note how the selected independent variables that have been linked onto the dependent variables such as organization culture and decision making behavior could have a very influential effect. These are actually valuable input in improving and realigning the kind of culture and work philosophy that we want to have in our organization.

Initially, many have been done in the public sector of this country today, in order to create a new image and carve a new dimension for the public bureaucrats as a whole. However, the ambitious effort for change need to be
carried out at a right phase and within a right frame. In understanding organization culture and its members, it is just like trying to solve the old scientific riddle of the egg and the chicken; "is it the egg or the chicken that comes first?". The same confusion may happen when we are too possessive talking about going for Quality, ISO 9000, efficiency and few other buzz-words of today. The question is then, "is changing the culture or training the people that should come first?". Of course many other questions can be related to this, if we are to change the culture, then, who should begin?, the top management or the subordinate? Or should we train and equip our human resources first then change the culture. In other words, spend the time and money first and hope that we get the results later.

Perhaps different individual may have a different perception over these issues but based on the result of this study, generally it can be concluded that organization culture can be the determinant factor to the kind of behavior towards work that prevail among its members. Decision making behavior as being the other area of interest in this study represent one of that work related behavior.