# How Does the Personality Type Define the Choice? A Survey to Accounting Students 

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#### Abstract

Choices as the result of decision making will always have consequences, including choices that involve monetary consideration in them. Profit or loss as a calculation of the costs and benefits arising from an activity will always be considered by a rational person in making a decision. With the concept of mental accounting studied by Thaler (1985) and Thaler (1999) where people will organize the outcome of a transaction, this study will provide a description of how accounting students will determine the attitude towards a risky choice. It was carried out by referring to the previous research conducted by Kahneman and Tversky (1981) with several scenarios illustrating the risks of loss to be faced in a choice. These scenarios were asked to accounting students as respondents using questionnaires through a survey method. Type A and type B personality types were used in this study as variables for distinguishing choices made between those two personality types. Overall, differences in the characteristics of people with type A and type B personality mostly gave some indistinctive results to some illustrations of choices made.


Keywords: Choice, Personality type, Accounting Students

## 1. INTRODUCTION AND RESEARCH BACKGROUND

Choice and decision are always being the inseparable things in an individual's life. So many aspects in life encourage people to make a decision towards some choices through simple and complex consideration. Education, career, relationships with other people, including choices involving monetary considerations are some of choices faced by a person in the scope of people's life. The choice made for investing activity, for example, must be involving so many considerations: whether someone will invest on saving, common stocks, bonds, or another instruments.

Schwartz (2007:50) stated that individual made choices for our existence in several alternatives. Schwartz (2007:50) also captured the phenomenon that nowadays making the right decision becomes more complicated and may involve more consideration and dimension due to the complexity of choice itself. The choices made can indeed improve the quality of individual's life; on the other hand, huge amount of choices will not always make life better. Due to so many choices, it also increases the psychological risk (Schwartz, 2007: 7).

In other words, decision making towards choices in some cases is something hard to make in view of some uncertainty conditions and conflicts. Choices in people's life will always have uncertain consequences, either it will be satisfying or disappointing (Shafir, Simonson, and Tversky, 1993). Moreover, prior to Schwartz (2007), Tversky and Shafir (1992) explained that since choosing activity involves an uncertain condition in future. On the other side, a person sometimes does not always understand to compare the cost against benefit, as well as risk against value and satisfaction against discomfort. This condition places a conflict as the consequence in choosing and it is like some cost to pay to get some freedom in choosing. It is easier to choose when one option is better than the other. People will experience conflict when each option has significant favourable and unfavourable condition (Tversky and Shafir, 1992).

When it goes to personal decision, choosing sometimes becomes individual activity. Kahneman and Tversky (1981) explained that there must be a decision problem in making the rational choice and people will always have their own psychological principles that govern the perception of decision problems. It also arises when people do the evaluation of probabilities and outcomes. Furthermore, individual's choice is founded on the assumption of human rationality and people also make allocation to consider gain or loss toward their decisions and choices (Kahneman and Tversky, 1981; Thaler, 1985)

Individual, on the other side, brings the set of behavioural characteristics that may influence the decision-making process of. Ivancevich, et al. (2014:410) explained that some behavioural factors can affect the implementation of decision-making process, either in certain aspects or in entire process (either the decision will be made rationally, administratively, or intuitively). Risk orientation is one of those factors. On the other side, personality type is also one of the personal attributes brought by people. It is embedded in an individual's characteristics and may influence the way people to make their choice. This study aims to examine how the differences in type A and type B personality as behavioural aspects will define the choices made.

## 2. LITERATURE REVIEW

### 2.1 Prospect Theory

Prospect can be defined as something that will be possible or potential to occur in the future. Kahneman and Tversky (1979) defined prospect theory as a descriptive model modifying the expected utility theory. This theory can be defined as how decision is made under the uncertain condition. Kahneman and Tversky (1981) distinguished two phases in the choice process: initial phase (framing of act, outcomes, and contingencies) and subsequent phase, which include the evaluation. Prior study by Thaler (1980) tried to enhance the study by Kahneman and Tversky (1979) regarding the prospect theory from the perspective of consumer behaviour and explained that some behaviours in choice could become complex.

Later, as explained in Kahneman and Tversky (1981) that in prospect theory, gains and losses are used as the expression of outcomes from the neutral reference outcomes, which is assigned a value of zero. The hypothetical value function of prospect theory explained by Kahneman and Tversky (1979) is commonly S-shape value function although subjective values differ among individuals and attributes: generally concave for gains and commonly convex for losses. For example, according to Kahneman and Tversky (1981), the difference in subjective value between $\$ 10$ and $\$ 20$ is greater than the subjective difference between gains of $\$ 110$ and $\$ 120$, as well as in value differences in losses.

Figure 1 illustrates the hypothetical function of prospect theory:
Figure 1 - A hypothetical value function of Prospect Theory


Source:https://psychology.iresearchnet.com/social-psychology/social-psychology-theories/pro spect-theory/

Based on the prospect theory explained by Schwartz (2007), horizontal axis represents the objective condition while the vertical one represents the subjective condition or psychological responses toward the change of condition. Later, according to Schwartz (2007), by using this theory, Kahneman and Tversky tried to show that people tend to be a risk averse instead of being a risk taker when considering getting the certain potential outcome. This statement is enhanced by Robin and Judge (2017:222) who stated that risk preference is sometimes reversed: the tendency to prefer certain thing over risky outcome is sometimes reversed by taking opportunity when overcoming negative outcome.

### 2.2 Choice and Decision Framing

Explained by Schwartz (2007), context in choice can be affected by language. The illustration of information about the fuel price in two petrol stations in Schwartz (2007) uses a different way to announce affect the customer subjective perspective towards those information. This effect is called framing effect. Framing is the term used by Kahneman and Tversky (1981) as a process while an individual makes his or her decision toward some choices. Kahneman and Tversky (1981), as cited in Takemura (1993), explained that the term of "decision framing" is used as a description toward a representation from the internal of an individual for a particular decision problem, and it also refers to conception of the act, outcomes, and contingencies related with particular choice of decision maker. Furthermore, Kahneman and Tversky (1981) as cited in Takemura (1993) explained that, in accordance with prospect theory, people tend to view outcome as gains in the positive frame and as losses in the negative frame.

Kahneman and Tversky (1981) later explained that framing toward decision problem is possible to be done in more than one way. Visual scene and alternatives perspective is compared to get the alternative frames. In the previous study, Kahneman and Tversky (1981) made some illustrations of choices and made the survey to the students at Stanford University and University of Columbia to describe the effect of variation framing and explained whether people tend to be risk averse or risk taker.

### 2.3 Key Issues in Decision Making

Choice and decision making are two concepts that must be brought together in one condition. Choice is made through decision making as a process of making choice from several options provided. Decision making itself, can be broken down into several analysis level: individual, group, or organizational. Every level of analysis has several key issues. In individual level, the limitation of information processing and personal biases could be the key issues in decision making (Huczynski and Buchanan, 2007).

Meanwhile, Robbins and Judge (2017) explained two main factors that may influence the process on decision making: individual differences and organizational constrains. Especially on individual differences, there are some factors that may influence the differences in making a choice and decision: personality, gender, mental ability, cultural differences, and nudging. Robins and Judge (2017) explained that deviations from rational model may be created from those factors. Especially in personality factor, the personal characteristics such as: achievement - oriented people or achievement striving individual, low or high self-esteem behavior that embedded in a person as an individual drive their behavior in making decision (Robin and Judge, 2017:223).

Another issue in decision making may happen after the decision has made. As mentioned before, a choice also can be brought to unsatisfied condition. Ivancevich, et al (2014:414) explained that anxiety can be occurred after decision is made that result to the doubt and second thought of decision maker
after the choice was made. It caused by inconsistent various cognitions in an individual (attitudes, beliefs, etc). This condition according to Festinger in Ivancevich, et al (2014: 414) is called cognitive dissonance. In this condition, there is conflict between knowledge and beliefs belong to the decision maker and what was done. It is basically can be reduce once an individual admit that a mistake has been made, but sometimes, individual being reluctant and may seek or selectively distort information to support their decision (Ivancevich, et al, 2014:414).

### 2.4 Mental Accounting

Using one of the illustrations and definition used by Kahneman and Tversky (1984), Schwartz (2004) re-explained the concept of "decision framing" by describing that there are psychological accounts in people's mind to classify the choices. Thaler (1985) previously explained this concept as mental accounting regarding individual decision making. An earlier study carried out by Thaler (1980) raised a statement that sometimes what is said by positive theories related to consumer choice will be different from the descriptive theory.

Thaler (1985) used some illustrations to describe how people classify some amounts of money into the "account" in their mind. For example, there is a couple that went for fishing and get the salmon. Due to the airline fault, they lost their fish when in packaging and got some money (\$300) as the compensation from the airline. Later, they spent that money (\$225) on dinner as they never spent that much on dinner. The couple according to Thaler (1985) classified the money as "gain" account and "food" account.

According to Thaler (1999), there are three components of mental accounting. First is related to how people will perceive and experience the outcome and then make the decision. Second, is the assigning the activities into the accounts in mental accounting system. Those activities could be assigned or classify into expenditure, flows, or stocks. Third component is related to the frequency of evaluating and "bracketing" the accounts.

Previous survey by Kahneman and Tversky (1981) as cited in Schwartz (2004) illustrates how the psychological accounts are occurred in human mind. It can be illustrated in decision to buy a ticket or not after losing the ticket or the money, also used in this study. It explains how people classify their expense in their psychological accounts.

### 2.5 Type A and Type B Personality Type

Personality is an attribute that embedded in an individual. Huczynki and Buchanan (2007:138) describe personality as some psychological qualities something that influence person's behaviour patterns. Personality has the characteristics: it has the stable nature and it distinguishes one individual to another. Stable means those behaviour patterns will be consistent although some opposite patterns may appear in an individual. Personality is distinctive,
which means that the behaviour pattern is unique one to another. The distinctive properties of behaviour are assumed can be observed, measured, and compared with properties of other (Huczynki and Buchanan, 2007:138-139)

There are so many personality type measurements. As mentioned above, this study uses the A and B personality type. Type A personality is opposite to another personality type, Type B personality. Type A personality can be found on person who is aggressive, tend to make more achievement is lesser time, it can be said that type A personality can be characterized by ambition, hostility, impatience, and a constant time - pressure. Meanwhile, Type B personality as the opposite, can be found in a person who are relax, low focus on achievement, and able to take leisure time (Friedman and Rosenman, 1974; Huczynki And Buchanan, 2007:151).

It is known that both of those personality types have their own behaviour characteristics, respectively. Type A and Type B personality mainly related to the matter of respond to stress in daily life. Friedman and Rosenman (1974) as cited in Huczynki and Buchanan (2007:151) found that Type A personality more likely to suffer heart disease than Type B personality. Friedman and Rosenman (1974) in Huczynki and Buchanan, 2007:152) also argue that a type A individual can change to type $B$ individual with some personal re-engineering strategies but it depends on the implementation on every single person itself.

The personality characteristics of Type A and Type B personality type can be distinguished briefly as can be seen on Appendix 1. In this study, based on the different characteristics of those personality types, it is presumed that it will make the different of choices made.

## 3. RESEARCH METHOD

This study is a quantitative descriptive research. It used the convenience sampling in survey method. Undergraduate accounting students from Universitas Atma Jaya Yogyakarta and Universitas Kristen Satya Wacana were participated in this study. Several illustrations based on prior research by Kahneman and Tversky (1981) were given to the respondents to be answered in classroom setting. The instrument for personality types is given to the respondent using the instrument by Huczynki and Buchanan (2007:170).

92 (ninety two) respondents in several groups answered brief questionnaires (respond rate $100 \%$ ) and 88 (eighty eight) questionnaires $(\mathrm{N}=88$ ) were able to be processed statistically. On each illustration given, the percentage that chose each option is indicated in brackets. For each answer in choice then will be mapped to the each personality type.

## 4. ANALYSIS AND INTERPRETATION

### 4.1 Descriptive Statistic

Respondents that participated in this study are mapped based on: gender, average age, personality type, and batch. The respondents were dominated by female accounting students (65,91\%) and 2017 college batch ( $43,20 \%$ ). Overall respondents had the average age of 19,23 years old (nearly 20 years old) and mostly had the Type A personality ( $85,23 \%$ ). The brief summary of respondent demography can be seen in Appendix 2.

### 4.2 Framing of Act and Outcome

In the previous study, Kahneman and Tversky (1981) gave some scenarios to illustrate the effect on decision framing: framing of act, outcome, and contingencies. This study limits the effect of framing only on framing of act and outcome.

Kahneman and Tversky (1984) explained that the characteristics of risky prospects can be seen on their possible outcomes and by the probability of these outcomes, either as gains or losses. The following Problem 1 and Problem 2 ( $\mathrm{N}=88$ ) shows the effect of variations in framing of outcomes (Kahneman and Tversky, 1981); Kahneman and Tversky (1984):

## Problem 1:

Imagine that the government in a country is preparing for the outbreak of an unusual Asian disease, which is expected to kill 600 people. Two alternative programs to combat the disease have been proposed. Assume that the exact scientific estimates of the consequences of the programs are as follows:

If Program A is adopted, 200 people will be saved [72, 73\%]
If Program B is adopted, there is $1 / 3$ probability that 600 people will be saved, and $2 / 3$ probability that no people will be saved [27, 27\%].
Which of the two programs would you favor?
In this problem, most respondents prefer Program A as their choice. This result is similar with previous study by Kahneman and Tversky (1981) as well as study by Kahneman and Tversky (1984). The majority of choice in this problem is risk averse. The number of saved people is attractive than a risk choice of saving $1 / 3$ probability from 600 people. The exact number of 200 people will be saved for sure being a preference for the most people (Kahneman and Tversky, 1984). It makes any sense since people will feel more secure by the exact number of saved person instead of taking a risk saving more people in uncertain condition.

It can be seen in Problem 1 that the illustration of gain or favorable condition is represented by the exact number of saved persons. The following Problem 2 is the cover story of Problem 1:

## Problem 2:

If program C is adopted, 400 people will die [29, 55\%]

If program D is adopted, there is $1 / 3$ probability that nobody will die and $2 / 3$ probability that 600 people will die [70, 45\%]. Which of the two programs would you favor?

In this problem, as it is can be concluded, the choice is dominated by risk taking. People tend to accept the probability of saved people instead of the certain death of people. Kahneman and Tversky (1981) conclude this phenomenon as the common pattern: choices involving gains are often risk averse and oppositely tended to risk taking when it involving losses.
Problem 1 and Problem 2 from the perspective of personality type, the choices can be seen on Table 1:

Table 1 - The Choices based on Personality Type on Problem 1 and 2

|  | Problem 1 |  | Problem 2 |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Program A | Program B | Program C | Program D |
| Type A <br> Personality | $62,5 \%$ | $22,7 \%$ | $25,0 \%$ | $60,2 \%$ |
| Type B <br> personality | $10,2 \%$ | $4,5 \%$ | $4,5 \%$ | $10,2 \%$ |
|  | $\mathrm{~N}=88) 100 \%$ |  |  | $(\mathrm{~N}=88) 100 \%$ |

From the table above, it can be described that from both of the personality type shows the same result. The majority of both personality types being the risk averse and risk taker in Problem 1 and Problem 2, respectively.

In term of the evaluation of prospects, according to expected utility model, the rational people will choose the prospect that offers the highest expected utility (Kahneman and Tversky, 1981). The next two problems, problem 3 and 4, illustrate the framing of act based on the study by Kahneman and Tversky (1981); Kahneman and Tversky (1984):

Problem 3 (the currency is changed to IDR): Imagine that you face the following pair of concurrent decision. First examine both decisions, and then indicate the options you prefer:
Decision (i), Choose between:
A) A sure gain of IDR 240.000 [65,91\%]
B) $25 \%$ chance to gain IDR 1.000 .000 and $75 \%$ to gain nothing ( $34,09 \%$ )

Decision (ii), Choose between:
C) A sure loss of IDR 750.000 [40,91\%]
D) $75 \%$ chance to lose IDR 1.000 .000 and $25 \%$ to lose nothing [59,09\%]

The risk averse as the majority of choice can be seen in decision (i) since the choice in scenario A is riskless. Oppositely, the majority of risk taking can be seen in decision (ii). This result is same as what Kahneman and Tversky (1981) did. Based on the prospect theory in Kahneman and Tversky (1981), the value of gaining IDR 240.000 for sure in decision (i) is greater than the value of gaining IDR 1.000 .000 for $25 \%$ chance. The same analysis can be applied in
the decision (ii) as the negative form of decision (i) as well as in the Problem 1 and Problem 2 (Kahneman and Tversky, 1981).

Problem 3 from the perspective of personality type, the choices can be seen on Table 2:

Table 2 - The Choices based on Personality Type on Problem 3

|  | Decision (i) |  | Decision (ii) |  |
| :--- | :--- | :--- | :--- | :--- |
|  | A | B | C | D |
| Type A <br> Personality | $56,8 \%$ | $28,4 \%$ | $35,2 \%$ | $50,0 \%$ |
| Type B <br> personality | $9,1 \%$ | $5,7 \%$ | $5,7 \%$ | $9,1 \%$ |
|  | $(\mathrm{~N}=88) 100 \%$ |  |  | $(\mathrm{~N}=88) 100 \%$ |

From Table 2 above, it can be concluded that both of personality types show the same result. Most of Type A as well as Type B personality choose the option A in decision (i), means that they are mostly being risk averse, and option D in decision (ii) that indicate that they are in the risk taking position. This result is in accordance with prospect theory by Kahneman and Tversky (1979).

Decision (i) and (ii) were presented together. From those patterns of choice, it can be summarized some choice patterns. The most popular patterns are A and D, and the least popular pattern is B and C. Those two patterns based on study by Kahneman and Tversky (1981) are presented in the Problem 4:

Problem 4 (The currency is changed to IDR):
Choose between:
A) A and D: $25 \%$ chance to win IDR 240.000 , and $75 \%$ chance to lose IDR 760.000 [12, 5\%]
B) B and C: $25 \%$ chance to win IDR 250.000 , and $75 \%$ chance to lose IDR 750.000 [87, 5\%]

It is easy to capture that the combination of B and C as the second option gives the more advantage than the other. Given in the same chance to gain and lose, it gives more amount of money to gain and gives less amount of money to lose. The rational decision maker will choose the second option. It also can be predicted that the result in Problem 4. The majority of the respondent (around 87,5\%) will choose the second option. The prior study by Kahneman and Tversky (1981) gave the ultimate result that the entire respondent (100\%) chose the second option.

Problem 4 from the perspective of personality type, the choices can be seen on Table 3:

Table 3 - The Choices based on Personality Type on Problem 4

|  | A and D |  |
| :--- | :--- | :--- |
|  | B and C |  |
| Type A Personality | $9,1 \%$ | $76,1 \%$ |
| Type B personality | $3,4 \%$ | $11,4 \%$ |
|  | $(\mathrm{~N}=88) 100 \%$ |  |

In Problem 4, it also can be predicted when the respondent is mapped to the personality type, the majority respondent, without considering whether they have Type A and Type B personality type, choose the second option (the combination of option in B and C scenarios)

In making a decision, the rational people will always consider the consequences. The consideration may involve financial calculation that leads to gain or lose, or further, satisfaction or satisfaction feeling as the outcome of decision. Kahneman and Tversky (1981) explained that some reference point is used to determine the evaluation process whether outcome will be gain or loss. Problem 5 and 6 illustrate how choices made on existing account in the mind (Kahneman and Tversky, 1981):

Problem 5 (currency is changed to IDR):
Imagine that you have decided to see a play (concert, movie, etc.) where admission is IDR 100.000 per ticket. As you enter the theatre you discover that you have lost a IDR 100.000 bill. Would you still pay IDR 100.000 for a ticket for the play?
A. Yes $[48,86 \%]$
B. No [51,14\%]

Problem 6 (currency is changed to IDR):
Imagine that you have decided to see a play (concert, movie, etc.) and paid IDR 100.000 per ticket. As you enter the theatre you discover that you have lost the ticket. Would you still pay IDR 100.000 for another ticket?
A. Yes $[47,73 \%]$
B. No [52,27\%]

Although the number of percentage is slightly different, the problem 5 in this study still gives the different result compared to the study by Kahneman and Tversky (1981) as well as study by Kahneman and Tversky (1984). In the prior study by Kahneman and Tversky (1981), 88\% respondent ( $\mathrm{N}=200$ ) prefer to still pay for $\$ 10$ for ticket when they lost $\$ 10$ bill in condition as mentioned in Problem 5.

As well as in the Problem 6 with the slight difference in percentage, the problem in this study gives the same result compared to the study by Kahneman and Tversky (1981) as well as study by Kahneman and Tversky (1984). In this study, around $52 \%$ respondent $(\mathrm{N}=88)$ states that they will not pay for IDR 100.000 for another ticket if they lost it, as well as in study by

Kahneman and Tversky (1981), 54\% respondent stated that they will not pay for another $\$ 10$ ticket when in condition as described in Problem 6.

Based on study by Kahneman and Tversky (1981), Schwartz (2007:81) explained this phenomenon of how people classify the amount of money in to their psychological accounts. The amount IDR 100.000 can be framed in different ways by the respondents. Study by Kahneman and Tversky (1981), in similar scenario as the illustration in Problem 5 and Problem 6, when the respondent lost some amount of money, they will spend the same amount to get the ticket and vice versa, when they lost the ticket, they will not buy the replacing ticket.

Schwartz (2007:81) explained this phenomenon based on the study by Kahneman and Tversky (1984) as the way how to frame the "psychological account". Imagine that in individual's "psychological ledger", there is "entertainment expense". In first illustration, when the respondents have to replace the ticket for some amount of lost money, they have classified this amount into "miscellaneous expense", so they will spend the money to replace the ticket. Oppositely, when the respondents lost the ticket, they could be have classified the amount of money for buying ticket in "entertainment expense", so buying another ticket to replace the lost ticket means increase the amount in "entertainment" expense (Kahneman and Tversky, 1984 as cited in Schwartz, 2007:81) .

As mentioned before, this study provided different result compared to the phenomenon studied by Kahneman and Tversky (1981). As can be seen on Problem 5, in the same illustration with the study by Kahneman and Tversky (1981), this study gives the result that most respondents will not spend the money for buying the ticket in case they have lost some amount of money. This phenomenon may happen since the ticket has not been bought yet, so the ticket has not been classified in "entertainment expense" in their "psychological ledger"

When Problem 5 and 6 is mapped based on personality types, the result can be seen on the Table 4:

Table 4 - The Choices based on Personality Type on Problem 5 and 6

|  | Problem 5 |  | Problem 6 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: |
|  | Yes | No | Yes | No |  |  |
| Type A <br> Personality | $44,3 \%$ | $40,9 \%$ | $38,6 \%$ | $46,6 \%$ |  |  |
| Type B <br> personality | $4,5 \%$ | $10,5 \%$ | $9,1 \%$ | $5,7 \%$ |  |  |
| $(\mathrm{~N}=88) 100 \%$ |  |  |  | $(\mathrm{~N}=88) 100 \%$ |  |  |

Form the table 4 above, as can be seen, there is a difference between Type A and Type B personality on Problem 5. Most respondents with Type A personality state that they will spend more to buy the ticket in case they have lost some amount of money. Meanwhile, most respondents with Type B
personality state that they will not spend more money on ticket in case they lost some amount of money. Different characteristic of both personality type bring the different result in this problem.

This condition also occurs in Problem 6 as they give the different result. Most of respondent with type A personality states that the will not spend money on another ticket once they lose it. In contrast, most of respondent with type B personality states that they will spend money on another ticket if they lose it. Similar with the previous problem (Problem 5), different characteristic of both personality type bring the different result in this problem (Problem 6).

Furthermore, still in case of framing the outcome, Problem 7 and 8 based on study by Kahneman and Tversky (1981) illustrate another way how choices made on existing psychological account:

Problem 7 (currency is changed to IDR):
Imagine that you are about to purchase a jacket for IDR 1.250 .000 and a calculator for IDR 150.000. The calculator salesman informs you that the calculator you wish to buy is on sale for IDR 100.000 at the other branch of the store, located 20 minutes' drive away. Would you make a trip to other store?
A. Yes $[62,5 \%]$
B. No [37,5\%]

Problem 8 (currency is changed to IDR):
Imagine that you are about to purchase a jacket for IDR 150.000 and a calculator for IDR 1.250.000. The calculator salesman informs you that the calculator you wish to buy is on sale for IDR 1.200 .000 at the other branch of the store, located 20 minutes' drive away. Would you make a trip to other store?
A. Yes [54,55\%]
B. No [45,45\%]

The problem 7 and 8 in this study also gives the different result compared to prior study by Kahneman and Tversky (1981). In Kahneman and Tversky (1981), respondents will buy the calculator for $\$ 5$ discount when the price of calculator is $\$ 15$. Reversely, people do not tend to get lower price when the price of calculator is higher (\$125). In this study, most respondents state that they will get the lower price of calculator no matter what it is on the price of neither IDR 150.000 nor IDR 1.250.000. The discount of IDR 50.000 affected the respondent's decision to buy calculator on both price without considering that in fact the IDR 50.000 discount on IDR 150.000 price is more material than on IDR 1.250 .000 price. It implies that rational people may still buy calculator in IDR 50.000 discount when the price is IDR 150.000, but not when the price is IDR 1.250.000 since the discount is less material. It can be concluded that the respondent's focus is only on the amount of discount and the IDR 50.000 discount is material for making the decision for buying. It means that there is no framing effect in this illustration.

When Problem 7 and 8 is mapped based on personality types, the result can be seen on the Table 5:

Table 5 - The Choices based on Personality Type on Problem 7 and 8

|  | Problem 7 |  | Problem 8 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: |
|  | Yes | No | Yes | No |  |  |
| Type A <br> Personality | $51,1 \%$ | $34,1 \%$ | $45,5 \%$ | $39,8 \%$ |  |  |
| Type B <br> personality | $11,4 \%$ | $3,4 \%$ | $9,1 \%$ | $5,7 \%$ |  |  |
|  | $\mathrm{~N}=88) 100 \%$ |  |  | $\mathrm{~N}=88) 100 \%$ |  |  |

From the table 5 above, as can be seen, there are no differences in choice at both Problem 7 and Problem 8. Most respondents in Problem 7 and Problem 8 with Type A Personality, as well as Type B personality, states that they will buy the calculator at IDR 50.000 discount at IDR 150.000 price and in IDR 1.250.000.

## 5. CONCLUSION

Based upon each of scenarios given, the study has shown that:
a. On Problem 1 and Problem 2, as well as on Problem 3 and Problem 4, it is clear that people tend to become risk averse when the gain is involved in choice. Conversely, people will tend to become risk taker when the choice involving loses. This result is in accordance with prospect theory (Kahneman and Tversky, 1979) and prior study by Kahneman and Tversky (1981). From the personality type mapping, it can be described that from both of the personality type shows the same result. The majority of both personality types being the risk averse and risk taker when the illustration involving gain and loss, respectively.
b. On Problem 5 the result on this study gives a few differences compared to prior study by Kahneman and Tversky (1981). In contrary, Problem 6 in this study gives the same result compared to prior study by Kahneman and Tversky (1981). The different way the respondents make the choice in problem 5 and 6 reflects the different way they frame the psychological account and also reflects the different way how the respondent classify some amount of money on accounts.
c. On Problem 7 and Problem 8, the result on this study also gives the different result compared to prior study by Kahneman and Tversky (1981). In prior study, people will not get the lower price when the price on thing is higher. In this study, seems like the most respondents are affected with the amount of discount price for decision making of buying without considering the materiality of the discount price compared to the selling price. Or in the other hand, it can be concluded that the discount price amount is material for buying consideration.

## APPENDIX

## Appendix 1 - Type A and Type B Personality Characteristics

| Type A |  |
| :--- | :--- |
| - Competitive | Type B |
| - High need for achievement | - Able to take time out to enjoy leisure |
| - Aggressive | - Easy-gocing |
| - Work fast | - Works at a steady pace |
| - Impatient | - Seldom impatient |
| - Restless | - Not easily frustrated |
| - Extremely alert | - Relaxed |
| - Tense facial muscles | - Moves and speaks slowly |
| - Constant feeling of time pressure | - Seldom lacks enough time |
| - More likely to suffer stress-related illness | - Less likely to suffer stress-related illness |

## Source: Huczynki and Buchanan, 2007

Appendix 2 - Respondent Demography

|  |  | Amount | Percentage (\%) |
| :---: | :--- | :---: | :---: |
| Gender | Male | 30 | 34,09 |
|  | Female | 58 | 65,91 |
|  | Total | $\mathbf{8 8}$ | $\mathbf{1 0 0}$ |
|  | 2015 and prior batch | 6 | 6,81 |
|  | 2016 | 14 | 15,9 |
|  | 2017 | 38 | 43,2 |
|  | 2018 | 30 | 34,1 |
|  | Total | $\mathbf{8 8}$ | $\mathbf{1 0 0}$ |
| Personality | Type A personality | Type B personality | 75 |

Source: Processed primary data, 2018

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