

Do Dishonesty, Ambiguity and Ethical Behaviour Affect? Risk Aversion?

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Abstract

The purpose of this study is to identify the effects of risk aversion, which are dishonesty, ambiguity and ethical behaviour. The first and third phase of this studies involve of completing a questionnaire to identify participant level of dishonesty and ethical behaviour. The second phase involves an experiment adapted from Ellsberg's which we identify participant tendency of risk taking on ambiguity condition. In this study we found that dishonesty has a negative effect on risk aversion meanwhile ambiguity and ethical behaviour have positive effect on risk aversion. Even though the result of ambiguity has positive effect on risk aversion, but this result has shown an insignificant effect. In the future, researchers are suggested to emphasize the risk for indicating the ambiguity on risk aversion.

Keywords: Risk aversion; Dishonesty; Ambiguity; Ethical behaviour

Introduction

Risk is known as something that will be affecting in every decision that every individual takes. How many people who are willing to take risk are depending on their preference? Everyone might have different traits when it comes to decision-making [1,2]. There are two types of people on taking risks, one who is a risk aversion and the other one is risk taking. Risk taking is seen as a good thing because people have great desire to achieve their goals and concern about the long-term goal either, but for someone who keeps taking risk, he will suffer a huge loss if he are very confidence on the opportunity which will occur. Meanwhile, risk aversion is for someone who dislikes risk and would prefer the lower risk. The reason why risk aversion people dislike risk is that they are fear of failure and only concern about the short-term goals.

In the real world, there is a correlation between the decision on taking the risk and the personality traits of dishonesty, ambiguity [3] and ethical behaviour [4]. In certain situations, there are people who are willing to do dishonest behaviour and others who are not willing to do dishonest behaviour. The decision maker (agent) could choose neither to do dishonest behaviour nor take the risk. Ambiguous information can hardly inform the agent to distinguish which one is the right decision to take. In this condition, the decision that he takes can become riskier than the decision he makes under certain and complete information. Ethics provides guidelines for appropriate action in certain situations, where unethical behaviour can increase the risk of doing business and the possibility of bankruptcy and severely damaged company brand and image.

For example, Toshiba Corporation is a Japanese electronics company with a very good reputation initially. The good reputation of Toshiba Corporation is now falling apart because of Toshiba is proven to lies to the public and investors by inflating profits in the financial statements to overstated profit by US \$1.2 billion over a seven years period, according to an independent committee. And more concerned about is the scandal that is involving top management (agent) from Toshiba Corporation. In this case, the agent has not worked in according to the professional ethics who does not consider the moral and professional in his activities. Risk-taking of the agent in choosing to report the different outcome from the actual outcome in order to meet the target performance unit. The agent dishonesty behaviour to manipulate financial statement gives lower risk for agent rather than the risk for the agent who not meets their target. The pressure and punishment of superiors will be given if they do not achieve their

target. In addition, employee compensation systems were calculated from financial performance also gives contribution to it.

Shortly, the principal might understand their agent personality traits in making a decision. It is very crucial, especially when it comes to dishonesty, ambiguity and ethical because without it principal might not meet his goal. Principal with risk-taking behaviour would prefer an agent that makes a high-risk decision, whom he will get a high return or even suffer for loss. And principal with risk aversion would prefer an agent that makes a decision at low risk, who can estimate their losses or limited losses they can tolerate [5]. If the agent makes a wrong decision, it will because principal suffered more losses [6].

Theoretical Background

The degree of risk aversion is often affected by personality traits which are it contains uncertainty such as dishonesty, ambiguity and ethical behaviour [3]. Risk and uncertainty are two terms, which relates to decision-making framework. Risk can be defined as potential consequences are known, and uncertainty exists when this potential is unknown. Dishonesty is when someone knows the certain outcome but reporting a different outcome instead, the risk that might happen from dishonestly involves in uncertainty in the future. Ambiguity often has more meaning that can lead other people of having a misunderstanding of it. The ambiguity that gives not enough information can cause the decision-maker takes a wrong decision that involves uncertainty. Ethical guidelines and codes develop slower than scientific progress. This is because scientific research on modern risk sources is often unlikely to happen. In this condition uncertainty exist when the potential are unknown.

When managers will make decisions, they must consider risk and uncertainty in decision-making. This condition can be explained by utility theory which every decision are taken by managers with the

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aim of maximizing the expected utility. If a manager experiences a marginal decline in profit, it means the manager is risk averse. And if a manager experiences an increase in marginal utility for profit, the manager is risk-taking. Carducci and Wong found that Type A has an impact on risk taking in everyday money matters. Type A individuals, characterized by hard-driving and competitive traits, take more risk than Type B individuals. Type A would try to achieve more material success than others with less concern for perceived personal limits. With their attempt to achieve economic success, we can assume that type A behaviour pattern would be associated with willingness to take greater risks in everyday financial matters than the type B pattern.

Dishonesty

Honesty is a fundamental value of running a company. Every management (agent) in the organization is trustworthy and honest. However, businesses do understand and realize the probability of some agent to act dishonesty and trick their decision-maker (principal). Dishonesty can be defined as lack of honesty or integrity, such as a fraudulent or deceitful act. Starting from the philosophy of Thomas Hobbes, Adam Smith, and the economic model of the standard of rational and selfish human behaviour (*homo economicus*) is belief that people are acting dishonestly with consciously and intentionally by trading from the expected external benefits and the cost of dishonest acts [7,8].

Dishonesty trait gives some benefit, which allows people both to feel better about them and to maintain the good relationship. But at the same time, the trait of dishonest behaviour will increase the risk that will cause people to be punished or it can generally erode trust in society. For example, when someone decides to act dishonest, they privilege received some other value over honesty such as compassion. Who tell prosaically of dishonesty is often viewed as more trustworthy and more moral than people who tell harsh truths. Moreover, these prosaically of dishonesty let us form larger social networks than we could otherwise maintain. Otherwise, lies not motivated by compassion constrain the size of social networks [9].

With this concept, we can assume that people who have the courage to act dishonest classified as risk-taking, where he rather choose dishonest (high risk) than to be honest (low risk). The decision to do dishonest behaviour is because the benefit of telling lies bigger than benefit when he tells the truth [10]. This conclusion is in line with previous research from Eastman, et al. [11] and Weller and Thulin [12], which dishonesty was related to risk-taking, he found that high dishonesty relates to lower risk averse.

Therefore the first hypothesis in this study can be formulated as follows:

H1: Dishonesty has negative effect on risk aversion.

Ambiguity

Although the outcome of risky prospects is often certain (you know exactly how much the return and loss), but sometimes the risk of the decision may be presented under the expected condition. When the risk occurs under conditions in which the probabilities are not known, it reflects ambiguous risk. In real life, the risk often presented the ambiguous risk which it only can reduce with learning or experience. According to the classical studies in decision-making, Daniel Ellsberg showed that people are very risk-averse in situations where they are aware of specific opportunities rather than alternative risk scenarios where the possibilities are completely ambiguous. People would prefer

select a known probability to win over unknown probabilities to win even if the known of probability is low and the unknown probability can be a guarantee of victory.

Individual risks taking behaviour can be driven by a person's behaviour towards risk (complete ignorance) and attitude toward ambiguity (risk) [13]. Research shows that adults (30-50 years) tend to dislike risk and ambiguity, where risk and ambiguity are correlated weakly [14,15]. However, recent studies from Tymula et al. [16] found a clear distinction in these risk-taking elements where both of adults and adolescents (12-17 years) dislike risk and ambiguity, but the studies unexpectedly have shown that adolescent more risk-averse than adults.

For example, the famous Ellsberg's experiment where urn A contains 100 red and black balls with an unknown ratio and urn B has exactly 50 black and 50 red balls. An individual who offers \$100 if the colour he chooses is drawn will receive \$200 pay off. And received \$0 if the other colour is drawn. This type of people included in risk-taking. But an individual who strictly prefers the same chance if the ball is drawn from urn A and urn B can be defined as risk aversion. Where they are respect to the chances of receiving some good which yields constant and only willing to offer under \$50. With this, we can conclude that every person is so risk-averse that they choose to stick with bad situations rather than face uncertainty. It means that the increase of ambiguity information will increase risk aversion of people at the same time. This conclusion is parallel with Charness and Gneezy [17], Trautmann and Wakker [18] and Butler et al. [19] research where they found positive correlation when risk-averse and ambiguity are measured for the same person but in the different task.

Therefore the second hypothesis in this study can be formulated as follows:

H2: Ambiguity has positive effect on risk aversion.

Ethical behavioural

Ethics can be defined as a guidance system for appropriate action against others, aiming to comply with certain rules or to achieve certain results in certain types of situations. Ethical behaviour is acting in a way that is appropriate to what people and individuals think is a good value [20]. Drucker [21] describes the ethical behaviour as a process of reflection and communal exercises concerning the moral behaviour of individuals based on establishing and declaring individual value standards. Ethical behavioural is the absolute requirement of all organizational leaders, whom employee moral behaviour is more important than knowledge. Li and Madsen [22] argue that the standard of one's behaviour in business should not be different from the standards that apply to every individual's life in general. He noted that the principal of the organization has the responsibility to uphold the highest standards ethical behaviour. Responsibility indicates that the principal is the person who will be blamed for the risk of the decision he took.

The decision-making process will always present ethical challenges for the agent. Some principal will not be too concerned if decisions are made on the basis of the ethical values as long as they achieve the results they expect. Here is the risk, if the principal is depending on how much he is driven by the results, he may ignore some ethical issues on behalf of good results and good earnings. This is especially true when the decision maker is a materialist moral philosophy [23], and when it comes to avoiding loss, making an unethical decision become more acceptable for all parties [24].

Experiments from Albert W. Tucker called the "prisoner dilemma". Whom two members of the criminal gang were caught and imprisoned. At the same time, the police gave every prisoner a Faustian offer. If one of them testifies against their friend, he will release and his friend will send to jail for three years. But if both of them go to testify they will be held for two years. Of course, it would be an option to testify against a friend, for being free is better than being imprisoned for one year. Where each person is a selfish person and only think of himself, where rationally people will be more resistant because the risk he receives is smaller if he testifies against his friends. The selfish behaviour can be defined as unethical behaviour because he will not do what is right, but he will choose the decision that gives him more advantage. From here we can conclude that unethical behaviour is acting that committed by risk-taking. This conclusion is supported by previous research from Kahneman and Tversky [25], Antes et al. [26] and Kish et al. [4] revealed a positive correlation between ethical behaviour towards risk-aversion.

Therefore the third hypothesis in this study can be formulated as follows:

H3: Ethical behaviour has positive effect on risk aversion.

Method and Data Gathered

Participants were undergraduate students at Atma Jaya University who are in last semester. The researcher has requests for cooperation with lecturers who plan to collect data so that lecturers have time to plan how to incorporate our requests into their syllabus. A total of 135 students completed the survey. The instruction sheet was given to each lecturer who agreed to participate in the study. The instructors read the same introductory script to their students, which include research objectives, and the number of time students need to complete the survey instrument. The survey was completed by all the students that attend the class that day, the only students who did not complete the survey were those who did not attend the day for the class.

Our research design involves three parts. In the first part, we measure the dishonesty with questionnaire adopted by Eve and Bromley [27] Scholastic Dishonesty Scale. This scale contained 9 items acts of dishonesty in the academic environment as shown in Table 1, where the participants were asked to indicate how much participant level of approval with the condition. This scale using five-level Likert with 1 representing strongly disagree, 2 represent disagree, 3 represent neutral, 4 represent agree and 5 represent strongly agree.

The second part, measurement of ambiguity was adapted from Dimmock et al. [28] where they tested Ellsberg's thought about ambiguity preference. The study involves a set of choices between unambiguous urns and ambiguous urns, before the experiment, participants were informed that it was analogous to the risk procedure, in which they get the red ball they would receive an extra point. Participants were presented with a set of 100 choices, in which each option asked them to choose between plays ambiguous urns, unambiguous urn or indifferent. Where "indifferent" if they see both of ambiguous and unambiguous urns equally attractive. At each option, unambiguous urns hold the proportion of 100 known colored balls (50 red balls and 50 white balls), with the proportion of ball choices. But the ambiguous urns hold an unknown proportion of the ball color. To avoid certainty, maximum of known probability is 99 and the minimum is 1.

To measure participants' ambiguity aversion precisely - specifically, we provide a sequence of questions through a series of choice that depends on the previous answer and meet to the point

of indifference. For example, if in the first round the participant chooses the ambiguous urns, we then decrease the probability of winning in unambiguous urns to 25% in the second round. But if in the first round the participant chooses the ambiguous urns, we then increase the probability of winning in unambiguous urns to 75% in the second round. This process is repeated until four rounds, where the participant's indifference point is approximated closely. We refer to the indifferent point where the participants do not care about the known probability of winning between unambiguous urns and ambiguous urns as matching probabilities [29]. The matching probability denotes as q and we define our key measure as: $Ambiguity\ Aversion = 50\% - q$. If the result of this measure is positive that means the participant is ambiguity aversion, but if the result is zero it means the participant is ambiguity neutrality and the negative results mean the participant is ambiguity seeking.

The third part, we measure the ethical behaviour where participants completed the Moral Potency Questionnaire (MCQ) by Hannah et al. [30] as shown in Table 2. The questionnaire takes about 10 minutes to complete. The basis shows that the ethical behaviour of a person is not only driven by the judgments they make. But also to the desire and inner fortitude. So with Moral Potency Questionnaire (MCQ) self-ratings, we can predict individual ethical behaviours. The survey question used five-level Likert with 1 representing strongly disagree, 2 represent disagree, 3 represent neutral, 4 represent agree and 5 represent strongly agree.

The last part, we measure the risk aversion where participants completed the PsychTests. The test consists of 58 questions in 30 minutes. Start from the number 1 to 43 participants choose the answer based on five-level Likert with 1 representing completely agree, 2 represent mostly agree, 3 represent somewhat agree/disagree, 4 represent mostly disagree and 5 represent completely disagree. And

Item
Gave another student answers during an exam
Wrote papers for another student
Developed relationship with instructor to get test information
Used notes or books during a test when prohibited
Sold paper to another student
Looked at stolen copy of test questions
Copied answers from another student during exam
Purchased paper from another student
Submitted paper was written by another student

Table 1: Scholastic dishonesty scale.

Item
Confront my peers if they commit an unethical act.
Confront a leader if he/she commits an unethical act.
Always state my views about an ethical issue to my leaders.
Go against the group's decision whenever it violates my ethical standards.
Assume responsibility to take action when I see an unethical act.
Not accept anyone in my group behaving unethically.
Take charge to address ethical issues when I know someone has done something wrong
Confront others who behave unethically to resolve the issue.
Readily see the moral/ethical implications of the challenges I face.
Work with others to settle moral/ethical disputes.
Take decisive action when addressing a moral/ethical decision.
Determine what needs to be done when I face moral/ethical dilemmas

Table 2: Moral potency questionnaire.

for the rest of the test, participants will choose the statement that suits them according to the decision toward risk. Sample questions from the scale include “Whatever plans you make, there is always something unexpected that will interfere with them” and “Rules are meant to be broken”.

Result

A clear majority of individuals in the study were risk averse where 50% (49 of 135) of subjects made a risk-averse decision at every opportunity. Beside that 42.9% (42 of 135) were risk-taking and 7.1% (7 of 135) were risking neutral. We dropped subjects from our analysis because of the limited data input in software SmartPLS 3 (student access). This was the case for 37 out of 135 which is 98 remains.

SmartPLS 3 software [31] has been used to analyse this research hypothesis to know the effect of dishonesty, ambiguity, and ethical behaviour. PLS is a component-based latent variable modelling technique that explained to maximize variance while minimizing measurement errors. PLS enables path models involving latent variables to be estimated, where the latent variables are indirectly measured by multiple indicators [32]. PLS is able to simultaneously verify theory (structural model) and measures (measurement model). PLS simulation of the model is carried out by calculating and testing various parameters (loading, reliability, and validity tests). It involves two-step processes, which is calculating PLS model parameters separately by solving out the blocks of the measurement model and then estimating the path coefficients of a structural model.

Measurement model evaluation is to evaluate the reliability and validity of the indicator. Reliability of the variables is tested based on individual item reliability and composite reliability and validity of the variables are tested based on convergent and discriminant validity.

We tested individual item reliability by verifying the factor loading of each scale-item. Adequate reliability is demonstrated when factor loadings for a construct are 0.70 or higher [33]. Even though factor loading 0.50 is regarded as acceptable and the factor loading value of less than 0.50 should be dropped. Factor loading between 0.4 and 0.7 should be reviewed before elimination and if the elimination of these indicators increases the composite reliability then discard or otherwise maintain the factors. Even though for this research the cut-off value taken for outer loading is 0.5, an iterative process is adopted for an elimination of the indicator variables by considering Henseler et al. suggestion. Two of dishonesty indicator (D6 and D8) have parametric measurement above the cut-off values, while the other seven indicators have achieved satisfactory measurement value. On the other hand, the result of the first round of ambiguity has automatically been deleted from SmartPLS. Even though some of the ethical indicators do not achieve the acceptable factor loading, this indicator cannot be eliminated because it will not increase the composite reliability as the suggestion from Henseler et al. Besides that all of the ambiguity indicators loaded higher than 0.906, this means that ambiguity has to demonstrate adequate reliability.

In addition, the composite reliability of 0.70 or higher is considered acceptable. Composite reliability is considered as the better measure of internal consistency because it employs the standardized loadings of the indicator. Each of the measurement models had a composite reliability higher than 0.883, indicating that all of the indicators are acceptable composite reliability.

We tested the convergent validity of the measurement models by carried out average variance extracted (AVE). An AVE of 0.5 indicates

acceptable convergent validity [34]. As shown in Table 3, The AVE for dishonesty and ambiguity are higher than 0.523, which means both of the models have to demonstrate adequate convergent validity. Except AVE for ethical which is 0.415 below the adequate convergent validity 0.5.

We also tested discriminant validity by confirming that the indicator in any construct is relevant to the indicator they intended to measure. Where it's cross-loading of scale items show that the items load higher than in any other construct.

A relationship between exogenous (independent) and endogenous (dependent) latent variables can be tested by structural model through evaluating value and path coefficients (β) of the model corresponds to the degree of explained variance of dependent latent variables, while β indicates the strength of an effect from variables to dependent latent variables. According to Cohen et al., for a good model, the value of the endogenous latent variable should be more than 0.26. Even though the value for the developed model is 0.118 which is lower than the suggested value. This result still can be considered as a good model because it is higher than 0.1, which is this model can explain the variance of dependent latent variable.

Testing path coefficient (β) of all latent variables by comparing values among all the paths. The highest value symbolizes the strongest effect of independent latent variable towards the dependent latent variable. However, value has to be tested for its significance level through the t-value test. The test is achieved by performing a nonparametric bootstrapping technique. Hair et al. [35] suggested that acceptable t-values for a two-tailed test are 1.65 (significance level=10%), 1.96 (significance level=5%), and 2.58 (significance level=1%). In this study, bootstrapping generated 98 samples and these samples are used to compute t-values. Results from Table 4 demonstrate that dishonesty and ethical behaviour path attained t-value are higher than the cut-off point for a significance level of 5%, that is, 1.96. This implies that dishonesty and ethical behaviour paths in the model have a strong effect on risk-averse.

Table 4 shows a direct positive relationship between dishonesty and risk-taking. This prediction is supported by the results of the structural model where the path coefficient leading from dishonesty to risk-averse is positive (0.250) and significant ($t=3.090$). The highly significant result and the relatively large path coefficient for this prediction suggest that dishonesty has an effect on risk-taking. This result is consistent with Weller and Thulin, and Eastman et al. [12,36] finds that individually make a dishonesty decision when they perceive they are in a loss position. When an individual is in a loss position, dishonest behaviour

Construct	AVE	CR	Alpha
Dishonesty	0.523	0.883	0.85
Ambiguity	0.885	0.959	0.957
Ethical	0.415	0.893	0.89

Table 3: Average variance extracted (AVE), Composite reliability (CR) and Alpha Cronbach statistics.

	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values
Ambiguity → Risk Taking	-0.0339	-0.0118	0.1112	0.3045	0.7614
Dishonesty → Risk Taking	0.2498	0.2695	0.0809	3.0897	0.0026
Ethical → Risk Taking	-0.2276	-0.3004	0.1105	2.0588	0.0422

Table 4: Mean, Standard deviation, T-values and P-values.

can be more acceptable because it could be just his way to protect his own benefit or other people's benefit such as their title in a company, money they are received and so on. When an individual is in a gain position, dishonest behaviour turns out to be risk-averse. No one wants to take the risk and if could (in by any chance), they would not do anything that put their position in a loss [37]. Based on prospect theory dishonesty is frequently viewed as risky behaviour, which is there is a probability of getting caught of his dishonest behaviour.

Table 4 shows a direct negative relationship between ambiguity and risk taking. This prediction is supported by the results of the structural model where the path coefficient leading from ambiguity to risk-taking is negative (-0.034) and insignificant ($t=0.305$). The insignificant result for this prediction suggests that ambiguity has no effect on risk-taking. This result is inconsistent with Charness and Gneezy and Butler et al. research of risk-averse, where they found positive correlation when risk-averse and ambiguity are measured for the same person but in the different task. The presence of ambiguity makes risk looks nicer, so one individual would choose the certain risk [38]. Choosing a certain risk also means that individual is risk-averse (avoiding the uncertainty risk). This finding is surprisingly different from what we had known because intuitively speaking; there should be some direct commonality between the two variables. When one individual has no clue about the risk of their chosen decision, he becomes less optimistic so he chooses a definite risk (risk-averse) [39]. The insignificant result happens because in this method of ambiguity model cannot indicate the ambiguity on risk-averse. Table 4 shows a direct negative relationship between ethical behaviour and risk-taking. This prediction is supported by the results of the structural model where the path coefficient leading from ethical behaviour to risk-taking is negative (-0.228) and significant ($t=2.059$). The significant result and the relatively large path coefficient for this prediction suggest that ethical behavior has an effect on risk-taking. This result is consistent with the findings of Kish et al. [4], that if an agent had ethical behaviour they would have made a risk-averse decision. Elffers [40] suggests that if an individual has the willingness to

be unethical, he must be daring to tolerant of the risks involved. Elliot and Taig [41] said that nobody or organization purely have an ethical behaviour, it is only about the level of risk acceptance in any means an ethical person would choose a decision that contains the lowest-risk among other decisions (Tables 5-7, Figures 1 and 2) [42].

Discussion

As with all studies, this study has several limitations, where the respondents were university students and they might not fully reflect

	Ambiguity	Dishonesty	Ethical
Ambiguity	0.9408		
Dishonesty	0.08	0.7234	
Ethical	0.124	-0.0255	0.6441

Table 6: Discriminant validity.

Latent constructs	Path coefficient	t-value	
Dishonesty	0.25	3.09	0.118
Ambiguity	-0.034	0.305	
Ethical	-0.228	2.059	

Table 7: Path coefficient for the structural model.

	Dishonesty	Ambiguity	Ethical
D1	0.7244	0.0986	-0.1182
D2	0.7459	0.0696	0.1317
D3	0.6798	0.0852	0.0197
D4	0.8654	0.0364	-0.0943
D5	0.5398	0.0621	0.1155
D7	0.8096	-0.0278	0.0037
D9	0.6515	0.2056	-0.0568
R2	0.0784	0.9322	0.1482
R3	0.0718	0.9064	0.0563
R4	0.0757	-0.0421	0.065
E1	-0.155	0.0668	0.6606
E2	-0.0006	0.0781	0.5795
E3	0.0204	0.0835	0.6923
E4	0.07	0.1097	0.7807
E5	-0.0612	0.1421	0.6274
E6	0.0254	0.1178	0.7023
E7	-0.0109	0.067	0.6411
E8	-0.0516	0.0509	0.7093
E9	0.0935	0.0407	0.5528
E10	0.05	-0.0077	0.5092
E11	-0.0177	0.0581	0.7245
E12	0.0988	-0.1011	0.4757

Table 5: Result of cross loading.

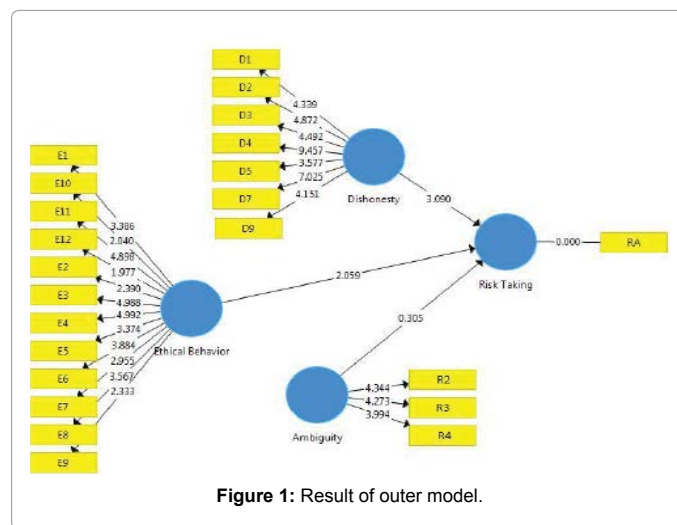


Figure 1: Result of outer model.

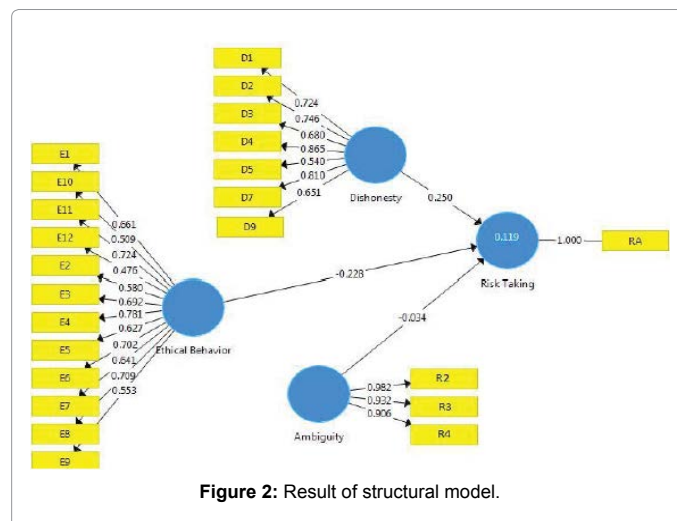


Figure 2: Result of structural model.

the risk aversion of the general population. The same can be said about the general population risk aversion toward dishonesty, ambiguity, and ethical behaviour.

The focus of the study here is to have a better understand the connection between dishonest, ambiguity and ethical behaviour correlate to risk-averse. The result of statistic test shows that dishonesty and ethical behaviour simultaneously have a significant effect on risk-averse. But ambiguity in this study shows no significant effect on risk-averse.

Ambiguity can lead to insignificant and negative correlation to risk-averse; because of the comparative-ignorance effect on risk and for the purely statistical reason (the maximally risk-averse subject cannot indicate ambiguity). In contrast, most of the previous research show clear evidence for a positive correlation use methods where ambiguity is measure independently of risk-averse is measured in the separate task. This correlation may also be sensitive to the elicitation method and to the way it is calculated. Little is yet to be known about the potential causes of the correlation but more research needed to identify the empirical link between risk-averse and ambiguity.

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