

THE WORD FRAMING EFFECTS, MORAL DILEMMA AND DECISION MAKING: CONCEPTUAL PAPER

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ABSTRACT

The study is a conceptual paper which attempt to propose the word framing effects to moral dilemma and decision making. The paper tries to describe the word framing effects indirectly toward decision making through moral dilemma as intervening variable. Not many previous studies have discussed about this topic. The study tries to explore the interrelationship between the word framing effects, moral dilemma and decision making by showing some logical statements or reasons behind the interrelationship. The future research can get the data from participants, such as investors, CEO, CFO or the leader who take a part (responsibility) in decision making. The participants were given some scenarios which show some relevant situations in accounting, finance and also business through experimental trial, filling in the form of questionnaires or answering the interview. The scenarios mostly determine and address them on their dilemma of choices, then, each of them make a choice as final decision. Finally, they take actions by following the previous decisions they have made.

Keyword: word framing, moral dilemma and decision making

INTRODUCTION

Behavioral research attempts to study how individuals are making decisions, interacting and influencing other individuals in organizations, market and society. The behavioral research primarily study about human actions in the variety of settings (Birnberg *et al* 2011). Nevertheless there are many information flow during communication or discussion between individuals and the environment. The further processing of communication and discussion are becoming to the negotiation between them in order to reach an agreement. How can the communication reach an agreement? because the negotiation were ended at one point which is called a decision. Before making decisions, they are in a moral dilemma situation. They try to bridge the gap between them in order to find the best option. At the end, they have the same choice or the same opinion. In this case, how can individual persuade the other ones to reach that point? It could be "the word framing"

The framing effects in accounting mostly occurred in financial reporting while investors do forecasting the company's performance or the auditors do some auditing tasks. In financial reporting, there are some indicators to determine the performance of company, such as profit, asset and cash flow. Many people said that the higher of profit fluctuation in company is the better performance of company. How about the loss, liabilities and other non financial information? Many people have their "own imagination" when using the words of loss, liabilities and debt. It means that the brain actually perceives and evaluates the rewards and losses and it directs the human to achieve the intended rewards and avoid losses. If there is a higher of the company's debt, there might be a problem in the company's financial. Therefore, the company suppose to pay attention to liabilities, debt and loss when they run their bussiness because these words have the meaning.

Researchers in human judgement and decision making are related with the fields of behavioral accounting, economic/finance/marketing. They have cataloged a variety of simple rules of thumb (heuristic) which the human mind apparently uses for dealing with complex decisions and choices, especially under uncertainty and ambiguity (Birnberg *et al* 2011). In making decision, humans are more complex, because they involve the careful considerations regarding risk and benefits to make choices or they require a variety behaviors involving several alternatives, possibilities and deductions of possible future consequences. Neuroscience has been contributing to the analysis of the decision making process because the brain acts in a specialized form, but also integrated, therefore there is no way to know which area responds to a specific behavior with 100% confidence (Cesar *et al* 2010).

One can infer that the decision makers use parameters defined by the organization to his/ her controlled process of decision making. It can be in the form of predefined targets or in the form of standard process to estimate targets. The optimal level estimative will be the result of probability analysis and the possibilities of occurrence of scenarios, such as the use of expertise, the past experience to estimate the budget targets and the information about the internal and external environments. The decision maker is not able to say clearly which parameters he or she used to make. The affective system is perceived as an influence to the decision making in accounting environment, such as fear, anxiety and skepticism.

The previous studies have stated that moral dilemma has affected the decision making. The moral dilemma also become a preferred paradigm in the field of cognitive neuroscience of moral decision making (Tversky and Kaneman 1981; Christensen and Gomila 2012). This recent paper tries to link the word framing effects, moral dilemma and decision making through relating the word framing effects toward moral dilemma and decision making indirectly

The broader potential contribution in the area of framing effects such as people are presented with a choice between a "sure thing and a gamble". Mostly people prefer the sure thing if the outcomes are framed as gains, on the other hand people also prefer

gamble if the outcomes are framed as losses. Samanez Larkin *et al* (2008) assess sensitivity in the anterior insula (an area involved in generating negative emotional reactions such as anxiety or disgust) as people anticipate monetary losses and report that heightened insular sensitivity to enhance an ability to avoid losses. These preferences could be caused by simple Pavlovian Reflex (Dayan and Seymour 2009 : Bossaerts *et al* 2009).

LITERATURE REVIEW

Theory of Mind

The topic is related with a special issue on the neuroscience of Theory of Mind (ToM). Theory of mind (often abbreviated ToM) is the ability to attribute mental states—beliefs, intents, desires, emotions, knowledge, etc.—to oneself, and to others, and to understand that others have beliefs, desires, intentions, and perspectives that are different from one's own. This theory has been investigated by developmental psychologists over the last 25 years, since the landmark publication of the paper by Wimmer and Perner (1983). ToM has been tested by using “False belief” task (Wellman, Cross and Watson 2001; Wimmer and Perner 1983) to predict or explain the character's subsequent action. For instance, we must pay attention to character's belief not just to actual location on the object (Dennet 1978). Furthermore, in order to understand the reason about someone's else false and beliefs, we must use general cognitive abilities including general perception and linguistic representations of the story working memory.

Alternatively, the way people talk about the mind might be an important because we use it in constructing mental state concepts. In these ways, verbal communication could facilitate ToM development without playing a constitutive role in representing the mental states as stated in the “communicative” hypotheses (Baldwin and Saylor, 2005; Harris 2005). The communicative hypotheses, by contrast allows for the possibility that language is facilitative during the development of mental state concept. Once these concepts are formulated, a mature of ToM could function even in the absence of language. Adults with a mature ToM can formulate other people's thoughts, even in the face of severe grammatical impairments. These data support the view that the link between language and ToM development is primarily communicative rather than parasitic.

Expected Utility Theory, Bounded Rationality Theory and Prospect Theory

The normative theories which use mathematical models to make predictions related to decision making are based on assumptions related to the ordering of alternatives, dominance, cancellation, transitivity, continuity and invariance. These models are still useful to predict decision in controlled environment (experiment). The lack of these theories in doing the complex math in dynamic environment were fully revised by the Bounded Rationality.

The prospect theory differs from the expected utility theory, because it substitutes utility by value (defined by gains or loss) and postulates that the value function of gain is different from the loss. It predicts that the effect of certainty show that people attribute more weight to the right results than to the probable results; it presents a reflexive effect that postulates the reverse of prospects reverts the preference; it discusses the effect isolation where one let aside the aspects that are shared by different results, focusing on the aspects that differentiate them (Cesar *et al* 2010)

Word Framing, Moral Dilemma and Decision Making

Framing involves social construction of a social phenomenon by mass media sources, political or social movements, political leaders or other actors and organizations. Participation a language community necessarily influences an individual's perception of the meanings attributed to words or phrases (Wikipedia)

The framing effect also raise the moral dilemmas being textual stimuli which trigger processing the brain regions involved in language processing. Some previous studies of moral dilemma also stressed the danger of framing effects due to use of different vocabulary in the dilemmas (Petrinovich *et al*, 1993; Petrinovich and O' Neill 1996). Mostly people prefer using the word “save” than “kill”. The using of “positive words” have the magnificent meaning than “negative words” as well as a mother talks to her children not for using the word “**Do Not** or **Jangan** (In Indonesian Language), such as **Do Not** play on the street or **Jangan** bermain di jalan raya (In Indonesian language), because there are many cars. They prefer using the word or sentence “You'd better play on the park than street, because playing on the park is safer than playing on the street”. Positive sentences are such kinds of affirmation for them.

A skeptical argument against neuroimaging studies of moral judgement pointed out that the neural underpinnings of moral judgement are suspiciously similar to those involved in different levels of language and text comprehension. Skepticism has been voiced specifically regarding the frontal regions of activation found on moral judgement with text stimuli in this case, the activation could be due to different levels of task demands associated with the process of text comprehension: as task demands go up due to the need for higher levels of text comprehension, neural activity is also enhanced (Christensen and Gomila 2012)

Moral conflict may be part of all individuals in facing life everyday. Moral dilemma allow one to elicit these moral conflicts and thoroughly investigate which parameters in our basic moral intuition respond to and all this under a high level of experiment control (Christensen *et al* 2012). Even, the lack of control expression styles in dilemma formulation could effect to subsequent moral judgement such as bias (Borg *et al* 2006).

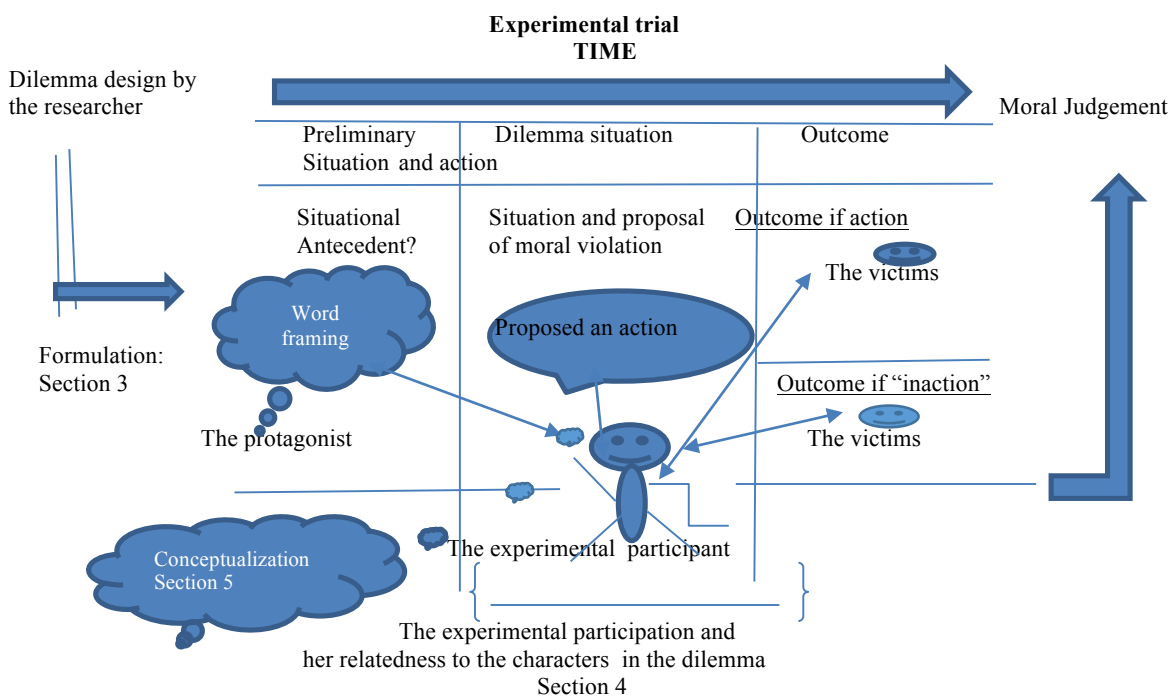
In 2006, fMRI study found a significant effect of the language used in dilemma formulation on neural activity. The results showed that there was a significant interaction of Language x Morality in brain structures related to emotion processing.

Language is not the only source of information in developing ToM because a lot of information can be collected through others' intention, perceptions and feelings which are decoded from subtle configurations of human face and body movements (Saxe *et al* 2006).

While making a decision, decision makers attempt to seek the neutral information, because neutrality can influence their perception in making the best option. But occasionally, the information can be biased or noisy, because in general, the company wants to portray a particular picture through financial information. But how about non financial information? Non financial information only include the words or even the pictures. All the numbers, words and pictures are meaningful. There are always some logical reasons behind the numbers, pictures and words because the numbers, pictures and words greatly affect to human economic behavior, specifically in making decision. For instance, people make a choice for "something" depend on the situation itself, mood and eventually habit. They have different own preferences over exactly situations because the way they are described (Christensen *et al*, 2012). Regarding their own mystical belief, people mostly unlike the number of 4 and 13 in numbering the house, room, passenger seat or even lift. They even think those numbers have "the sacred meaning". If they still use those numbers, something worse will happen to them or they will get the terrible accident. Another example is about the people who prefer a situation in which half a population is saved to one in which half the population dies in an epidemy: people also prefer a "cash discount" over a credit card surcharge" (Thaler 2008). Another studies of using pictures instead of text stimuli in Theory of Mind (TOM) and moral judgement tasks report similar patterns of neural activation as studies that use text (Cikara *et al* 2010; Ciaramidaro *et al* 2007).

METHOD

The proposed design of research can use the experiment trial, questionnaires or interview where the participants or respondents were given some scenarios on accounting, financial or business related with the decision making. The target participants or respondents are individuals who play a role or responsible in making decision such as the leader of company, CEO, CFO or even the investors. Here is the experiment trial which show the flow of participant while making decision .



Source: Christensen et al 2012

Figure 1: The Experimental Sections

The figure 1 shows that the time period of a single experimental trial presenting a moral dilemma to an experimental participant. The moral judgement of participant will vary as functions of the weighting of different variables. The time are the dilemma's period as presented to the participant. When the participant (he) begins to read the dilemma, he obtains information about the preliminary situation of the dilemmatic encounter and asked to take a perspective to the protagonist of the story. Then the dilemmatic situation is described. Subsequently, the dilemma formulation will lead the participant to understand the two options of outcome that there are for the dilemma and propose an action of moral transgression to change the first described course of events. The participant will see himself in the situation of having to choose between two sets of victims. The first set would be harmed if the participant chooses not to intervene in the situation and the second set of victims would only be harmed if the participant chooses to carry out the proposed moral transgression. It is very important how the dilemma is formulated in section 3. Section 4 show how the experimental participant will be influenced by variables concerning her relatedness to other characters in the dilemma. Finally, the paper explores the dilemma conceptualization which has to be explicit in the dilemma formulation from the outset. The variables described in all three sections interact in the process that will eventually lead the experimental

participation to carry out one moral judgement to another. The scenarios setting are used for this experimental trial (Christensen et al 2012)

Another research design can be used to test these variables by using the intervening variable to mediate the relations between the word framing effect toward decision making. The relation between them are mediated by moral dilemma as intervening variable. The path analysis can be used to test this model



CONCLUSION

The conclusion of the paper is the understanding of brain functions as a guidance for future actions. The current paper states that the word framing is a kind of activity in the brain function which furtherly determine the human behavior during making a decision. There are still remain many behavioral variables which probably affected human behavior in decision making. The future studies can include the fear, skepticism, expertise, experiences, the intuition or feeling with the holly spirit or spiritual values and even the affirmative phrases during the making decision process. The specifically area in making decision is setting the budget manuals or budgetary target levels instead of forecasting the company's performance.

The implication of future research is there will be an effort to standardize the amount of descriptive and dramatic language to control the vocabulary in those languages, instead of word framing in different dilemma categories. Through the framing effects, the human remains to fine tune the knowledge of the extent to which some regions of neural activation are proper to language processing or moral cognition. The involvement of a brain area in multiple functions is not an exception but the rule (Gomila and Calvo 2010). It also appear that some processes of language comprehension are shared with other processes of language comprehension. It is crucial to make sure that we have to control for linguistic components such as syntactic complexity, semantic ambiguity, text conference, expression style etc (Christensen et al 2012)

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