

## **Social Dilemmas and Cooperation**

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### ***Abstract***

*Social dilemmas is a situation where one's must decide what action to take, whether to prioritize the interests of others or personal. In this situation, one's often experience conflict in determining the action to be taken. One's may cooperate by prioritizing the interests of others or choosing not to cooperate by prioritizing personal interests. Cooperation is not easy to do because sometimes one's put their personal interests ahead of others in solving social dilemmas. Personal interests are usually more short-term compared to the interests of others who are usually more long-term. Social dilemmas do not always occur in individuals but can also be in groups. The choice of action that can be taken by these individuals can be influenced by structural factors, psychological factors and dynamic interaction processes. Social dilemmas can occur in various contexts faced by individuals. For example, environments, individual goals in groups, energy conservation, blood donors, use of environmentally friendly vehicles, use of public or private vehicles, bribery and so on. Social dilemma research in Indonesia is still rare. Therefore, research opportunities related to social dilemmas are widely open.*

**Key words:** *Social Dilemmas, Cooperation*

## INTRODUCTION

The situations in which the individual has to decide which behavior will be taken whether to benefit himself or the common good are called social dilemmas (Dawes, 1980, Dawes & Messick, 2000, Kollock, 1998, Meleady, Hothrow, & Crisp, 2013; Van Lange, Joireman, Parks, & Van Dijk, 2013). Dawes (1980) states that social dilemmas generally defined by 2 things; 1) each individual receives a higher result when choosing to be different from non-cooperative than choosing to cooperate, regardless of what others do, 2) everyone gets better results when all are working together rather than non-cooperative.

Beside that, Dawes (1980) states that there are two important factors that lead one to show cooperation in social dilemmas situations; 1) individuals must think and strive to understand the nature of the dilemma, so that moral, normative, altruistic, and external concerns can influence behavior, 2) individuals must have reason to believe that others will not betray, on the other hand differences in results will support betrayal no matter what others do. Absolute results (no distinction from one another) are more likely to allow individuals to cooperate.

Van Lange et al. (2013) states that the definition given by Dawes (1980) still does not include some other structure of interdependence structures that can capture conflicts between personal interests and collective interests. This definition also does not include the time dimension because the outcome can be immediate (short-term) or delayed (long-term). With that in mind, they formulate a new definition of social dilemma as a situation that involves a conflict between one's short-term personal interests and the group's long-term interests.

Van Lange et al. (2013) suggests that many of the world's problems are occurring as a form of social dilemma because basically the social dilemmas situation is very varied, such as forest destruction, littering, discipline in traffic, excessive exploration of natural resources, private vehicles rather than public transport, and so on. That is what makes social dilemmas a study of a wide range of subjects. The social dilemma situation itself can occur between individuals, individuals with groups, communities and even countries. Where there is a difference of interest and is required to vote, it does not close the possibility in which there is a social dilemma situation (Van Lange et al., 2013). Irwin & Berigan (2013) states that in

various studies of social dilemmas, cooperation becomes a measurable solution of the situation. The social dilemma is used as the setting of the situation, while cooperation is measured. The solution to this dilemma requires cooperation, which requires that individuals forgo individual gains for the benefit of the group.

Cooperation defined as any action intended to benefit others, regardless of whether individuals also benefit in the process (Van Lange, Balliet, Parks, & Van Vugt, 2014). Sometimes cooperation is defined as giving or contributing to collective needs and not utilizing collective resources (Van Lange et al., 2013; Van Lange et al., 2014). Ratner (2007) explains that cooperation is generally defined as people working together, coordinating their actions, considering their actions and interests. More specifically means that people work toward a common goal that benefits the participants, and it expresses common interests that are featured in collective and coordinated action.

Irwin & Berigan (2013) mentions that cooperation is a behavior in which individuals forget the benefits gained for the good of the group. Based on several definitions previously mentioned, cooperation is a behavior that puts the interests of others and groups rather than personal interests. Someone is called cooperative

when prioritizing the interests of others and groups rather than personal interests. While one is called uncooperative when prioritizing personal interests than the interests of others or groups. Cooperation is not an easy thing to do because behind the common goal there is a personal goal owned by each individual. This can lead to conflicts between individual and collective needs (Dawes, 1980; Meleady et al., 2013; Van Lange et al., 2013). This distinction between individual interests and collective interests lies in the absence of cooperation.

Deutsch (1949) developed the theory of cooperation versus competitive. This theory is based on two ideas: First, it relates to the type of interdependent state of affairs between the people involved in creating the atmosphere. Secondly, the type of action taken by the people involved. Then the basic type of interdependence is identified in two ways: 1) positive, where the goal is connected in such a way that the number or probability of achieving one's goals, and 2) negatively correlated with the number or probability of achieving another goal. In developing the theory, Deutsch assumes that team members work to advance their self-interest by striving to achieve their goals. However, the pursuit of self-interest does not preclude the development of productive

relationships and teamwork. Deutsch argues that structured goals determine how people interact, and this pattern of interaction will determine outcomes (Johnson & Johnson, 1989; Johnson, Maruyama, Johnson, Nelson, & Skon, 1981; Stanne, Johnson & Johnson, 1999).

This article was created to provide an overview of studies conducted in a social dilemma and cooperation. With the explanation of this study is expected to provide clarity related concepts and research in social dilemma and cooperation.

## **METHOD**

This research is literature research by looking for reference theory relevant to the case or problems found. Library research or literature review is a study that examines or critically reviews the knowledge, ideas, or findings contained in the body of academic-oriented literature, and formulates its theoretical and methodological contributions to a particular topic. The focus of library research is to discover the various theories, laws, propositions, principles, or ideas used to analyze and solve the research questions formulated. Furthermore, descriptive analysis is done by describing regularly data that has been obtained, then given the understanding and explanation in order to be understood.

## **RESULT AND DISCUSSION**

Social dilemmas occur everywhere around us, both in small and large scope, from family to country in the world in various forms. In situations of social dilemma, people is required to choose the behavior to be undertaken, whether to follow his personal interest or collective interest. The situation of social dilemmas occurs in many aspects such as energy conservation, blood donation and the use of environmentally friendly vehicles (Attari, Krantz & Weber, 2014), differences in individual goals in groups (Meleady et al., 2013), use of private vehicles and public transport (Van Vugt, Meertens & Van Lange, 1995), environment (Irwin & Berigan, 2013) and corruption by bribery (Kobis, Van Prooijen, Righetti, & Van Lange, 2017). Van Lange et al. (2014) describes some of the social dilemmas that may occur around us; 1) environmental sustainability, 2) community resource management, 3) transportation and mobility, 4) politics, 5) international security, and 6) public health.

Most studies on social dilemmas use experimental methods with games held in the laboratory. In this experimental game, participants are faced with situations that are required to choose from several options that indicate cooperative or defective (non-cooperative). There is a reward

matrix information that describes the results participants can get (eg, money).

There are three things as a combined function of structural influences, psychological influences and dynamic interaction processes that influence cooperative behavior in social dilemmas (Van Lange et al., 2013; Van Lange et al., 2014). Structural influences consist of reward, punishment and social death penalty, asymmetries in resources, benefits and roles, uncertainty, and noise. Psychological influences consist of social value orientation, trust, consideration of future consequences, others individual differences, decision framing, priming, heuristics, and affect. In dynamic interaction proses, there are direct reciprocity, indirect reciprocity, locomotion, communication, and support for structural solution.

Research on social dilemmas is common in many countries. Nevertheless, in Indonesia this research is still undiscovered. From searching in DOAJ, there was only one study of social dilemmas, about a critical review of the social dilemmas theory. In fact, research on social dilemmas and cooperation has not yet been discovered. Therefore, research on it is very wide open in Indonesia especially to see the condition of Indonesia which currently

can be said is experiencing a decline in cooperation. This is evident from the various conflicts that occur in Indonesia and also so easily the Indonesian society is influenced by hoax. Hoax is very easily spread through social media that can affect cooperation in Indonesia. Therefore, by conducting research related to social dilemmas and cooperation in Indonesia can illustrate how these variables develop in Indonesia with empirical evidence.

## CONCLUSION

In our study, we presented that social dilemmas happen everywhere around us. When a person faces a situation where he has to choose between collective and personal interest, there is a social dilemma occur. The solution to solve social dilemmas is cooperation. From several definitions already mentioned in the introduction, it can be concluded that cooperation is a behavior that puts the interests of others and groups (collective) rather than personal interests. Someone is called cooperative when prioritizing others and groups (collective) interests rather than personaz I interests. While one is called defective (non-cooperative) when prioritizing personal interests than the interests of others or groups.

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