The psychology of social dilemmas: A review
Paul A.M. Van Lange*, Jeff Joireman, Craig D. Parks, Eric Van Dijk
VU University Amsterdam, Department of Social and Organizational Psychology, Van der Boechorststraat 1, 1081 BT Amsterdam, The Netherlands

Article info
Article history:
Received 22 December 2011
Accepted 21 November 2012

Accepted by: Eric van Dijk, Craig D. Parks and Paul A.M. van Lange

Keywords:
Social dilemma
Human cooperation
Trust
Reward
Punishment
Self-interest
Social decision making

ABSTRACT
Broadly defined, social dilemmas involve a conflict between immediate self-interest and longer-term collective interests. These are challenging situations because acting in one’s immediate self-interest is tempting to everyone involved, even though everybody benefits from acting in the longer-term collective interest. As such, greater knowledge of social dilemmas should help us understand not only the theoretical puzzles of why people cooperate (or not) but also the ways in which cooperation in groups and organizations can be maintained or promoted. This article reviews different types of social dilemmas, highlights recent developments in the field (especially within psychology), and suggests some new avenues for future research. We illustrate that the field of social dilemma is growing and flourishing in terms of theory, interdisciplinary collaboration, and applicability, producing insights that are novel, replicable, and applicable to many social situations where short-term self-interest is at odds with the long-term interests of teams, organizations, or nations.

Introduction
Many of the world’s most pressing problems represent social dilemmas, broadly defined as situations in which short-term self-interest is at odds with longer-term collective interests. Some of the most widely-recognized social dilemmas challenge society’s well-being in the environmental domain, including overharvesting of fish, overgrazing of common property, overpopulation, destruction of the Brazilian rainforest, and buildup of greenhouse gases due to overreliance on cars. The lure of short-term self-interest can also discourage people from contributing time, money, or effort toward the provision of collectively beneficial goods. For example, people may listen to National Public Radio without contributing to its operations; community members may enjoy a public fireworks display without helping to fund it; employees may elect to never go above and beyond the call of duty, choosing instead to engage solely in activities proscribed by their formally defined job description; and citizens may decide to not exert the effort to vote, leaving the functioning of their democracy to their compatriots.

As the preceding examples illustrate, social dilemmas apply to a wide range of real-world problems; they exist within dyads, small groups, and society at large; and they deal with issues relevant to a large number of disciplines, including anthropology, biology, economics, mathematics, psychology, political science, and sociology. Given their scope, implications, and interdisciplinary nature, social dilemmas have motivated huge literatures in each of these disciplines. Several excellent reviews of this literature exist, but many are dated or are narrowly focused on a specific variable that influences cooperation in social dilemmas. In the present paper, we build on past reviews by outlining key principles relevant to the definition of social dilemmas, summarizing past reviews, discussing recent developments in the field, and identifying future research directions with the potential to shed additional light on this important and ever-developing field.

Social dilemmas: beyond the prisoner’s dilemma and immediate consequences
Social dilemmas come in many flavors. Sometimes cooperation means giving or contributing to the collective, sometimes it means not taking or consuming from a resource shared by a collective. Sometimes the time horizon is short, even as short as a single interaction, sometimes it is long-lasting, almost without an end as in ongoing relationships. There are social dilemmas involving two persons, and social dilemmas involving all people living in a country, continent, or even world. Not surprisingly, the diversity in social dilemma settings has led researchers to offer a range of different definitions for the concept. In his Annual Review of Psychology article, Dawes (1980) was one of the first who formally coined the term social dilemma, which he defined as a situation

* Corresponding author.
E-mail address: pam.van.lange@psy.vu.nl (P.A.M. Van Lange).
solution is simple, and there is no dilemma. However, if one party
spondence of joint and own outcomes might suggest that the
comes occur when both partners choose to cooperate. This corre-
and is unique in that the highest collective
all end up worse off than if all had cooperated.
individual, and if all pursue this non-cooperative course of action,
cooperative course of action that is (at times) tempting for each
conflict essential to social dilemmas is retained: there is a non-
Trust) Dilemma. In both dilemmas, the individual vs. collective
ation allows us to include social traps, social fences, public good
dilemmas, and resource dilemmas (see Table 1). We briefly discuss
both features in turn.

Prisoner’s, chicken, and assurance dilemmas

The well-known Prisoner’s Dilemma has often been used as the
basis for defining social dilemmas, which is also evident in Dawes’
definition. We suggest that two other outcome interdependence
structures can also be viewed as social dilemmas, if one relaxes
the requirements for a dominating strategy and a single equilib-
rium. These structures include the Chicken and the Assurance (or
Trust) Dilemma. In both dilemmas, the individual vs. collective
conflict essential to social dilemmas is retained: there is a non-
cooperative course of action that is (at times) tempting for each
individual, and if all pursue this non-cooperative course of action,
all end up worse off than if all had cooperated.

In the Chicken Dilemma, each person is tempted to behave non-
cooperatively (by driving straight toward one’s “opponent” in an
effort to win the game), but if neither player cooperates (serves),
both parties experience the worst outcome possible (death). Clearly,
Chicken does not involve a dominating strategy, as the best
decision for an individually rational decision maker depends on
what he or she believes the other will do; if one believes the other
will cooperate (serve), the best course of action is to serve non-
cooperatively (and continue driving ahead); however, if one is con-
vincing that the other will not cooperate (will not serve), one’s
best course of action is to cooperate (serve), because it is better
to lose the game than to die. There are interesting parallels be-
tween Chicken and situations in which people are faced with the
dilemma whether to maintain honor or status at nearly any risk
(see Kelley et al., 2003).

The Assurance (Trust) Dilemma also lacks a dominating strategy,
and is unique in that the highest collective and individual out-
comes occur when both partners choose to cooperate. This corre-
spondence of joint and own outcomes might suggest that the
solution is simple, and there is no dilemma. However, if one party
considers beating the other party to be more important than
obtaining high outcomes for the self and others, or is convinced
the other will behave competitively, the best course of action is
to not cooperate. Thus, like the Chicken Dilemma, the Assurance
Dilemma is a situation in which there is a non-cooperative course
of action that can (at times) be tempting for each individual, and if
all pursue this non-cooperative course of action, all are worse off
than if all had cooperated.

The temporal dimension

We often see that the consequences for self can be immediate or
delayed, just as the consequences for the collective can be immedi-
ate or delayed. This temporal dimension is exemplified in social
traps, or situations in which a course of action that offers positive
outcomes for the self leads to negative outcomes for the collective.
Examples of delayed social traps include the buildup of pollution
due to overreliance on cars, and the eventual collapse of a common
fishing ground as a result of sustained overhunting. Given their
emphasis on “consuming” or “taking” a positive outcome for the
self, social traps are often called take some dilemmas, a classic
example of which is the commons (or resource) dilemma.

These social trap situations may be contrasted with social fences,
or situations in which an action that results in negative conse-
quences for the self would, if performed by enough people, lead
to positive outcomes for the collective. Examples of delayed
social fences include the eventual deterioration of a company’s pos-
itive culture due to employees’ unwillingness to engage in extra-
role (or organizational citizenship) behaviors, such as being a good
sport and helping new employees adjust, and the gradual deterio-
ration of an education system due to taxpayers’ unwillingness to
fund school levies. Given their emphasis on “giving” something of
the self (such as time, money, or effort), social fences are often
called give some dilemmas, a classic example of which is the public
goods dilemma, which have been extensively studied by economists
in particular.

Definition and history

We define social dilemmas as situations in which a non-cooper-
ative course of action is (at times) tempting for each individual in
that it yields superior (often short-term) outcomes for self, and if
all pursue this non-cooperative course of action, all are (often in
the longer-term) worse off than if all had cooperated. This defini-
tion is inclusive of the well-known prisoner’s dilemma, as well as
the Chicken Dilemma and the Assurance (or Trust) Dilemma, and
it includes the “correlation” with time, such that consequences
for self are often immediate or short-term, while the consequences
for the collective often unfold over longer periods of time. We sug-
gest that this provides a fairly comprehensive definition of social
dilemmas. At the same time, we acknowledge that other important
distinctions are not included. One such distinction is the difference
between first order dilemma, which represents the initial dilemma,
دریافت فوری
متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات