



## Impact of episodic thinking on altruism



Richard Yi <sup>a,\*</sup>, Alison Pickover <sup>b</sup>, Allison M. Stuppy-Sullivan <sup>a</sup>, Sydney Baker <sup>a</sup>, & Reid D. Landes <sup>c</sup>

<sup>a</sup> Department of Psychology, University of Maryland, College Park, MD 20742, United States

<sup>b</sup> Department of Psychology, University of Memphis, Memphis, TN 38152, United States

<sup>c</sup> Department of Biostatistics, U. of Arkansas for Medical Sciences, Little Rock, AR 72205, United States

### HIGHLIGHTS

- Approaches to enhance altruism can positively impact individuals and societies.
- In three studies, we examine the influence of episodic thinking on social discounting.
- Use of episodic thinking to imagine other's scenarios reduced social discounting.
- Episodic thinking to imagine the self in the future reduced social discounting.

### ARTICLE INFO

#### Article history:

Received 6 July 2015

Revised 17 March 2016

Accepted 21 March 2016

Available online 16 April 2016

#### Keywords:

Altruism

Social discounting

Prospection

Construal level theory

Theory-of-mind

### ABSTRACT

Episodic future thinking, which refers to the use of prospective imagery to concretely imagine oneself in future scenarios, has been shown to reduce delay discounting (enhance self-control). A parallel approach, in which prospective imagery is used to concretely imagine other's scenarios, may similarly reduce social discounting (i.e., enhance altruism). In study 1, participants engaged in episodic thinking about the self or others, in a repeated-measures design, while completing a social discounting task. Reductions in social discounting were observed as a function of episodic thinking about others, though an interaction with order was also observed. Using an independent-measures design in study 2, the effect of episodic thinking about others was replicated. Study 3 addressed a limitation of studies 1 and 2, the possibility that simply thinking about others decreased social discounting. Capitalizing on Construal Level Theory, which specifies that social distance and time in the future are both dimensions of a common psychological distance, we hypothesized that episodic future thinking should also decrease social discounting. Participants engaged in episodic future thinking or episodic present thinking, in a repeated-measures design, while completing a social discounting task. The pattern of results was similar to study 1, providing support for the notion that episodic thinking about psychologically distant outcomes (for others or in the future) reduces social discounting. Application of similar episodic thinking approaches may enhance altruism.

© 2016 Elsevier Inc. All rights reserved.

Egoistic theories of altruism posit that some degree of self-interest exists in all altruistic behavior; for example, Hamilton's (1964a, 1964b) theory of inclusive fitness proposes that altruistic behavior is due to a desire to ensure the survival of one's genes. More recently, Rachlin (2002) has proposed that an altruist integrates the values of delayed, positive outcomes that result from a series of altruistic acts in a society governed by norms of reciprocity. Rachlin posits that the altruist delays (small) immediate gratification associated with selfish acts for (large) delayed gratification associated with altruistic acts. In other words, altruism is a form of self-control (other prominent scientists

have also explored the conceptual and practical similarities between self-control and altruism; Ainslie, 1992; Boyer, 2008; Read, 2001).

Informed by the literature on delay discounting as a measure of self-control, Rachlin and Jones (2008) developed a binary choice procedure that ostensibly measures altruism by quantifying the rate at which an individual discounts a reward for others. This assessment of *social discounting* refers to the reduction in the subjective value of an outcome for another individual as a function of the social distance, where a high rate of social discounting indicates that rewards quickly lose value as social distance increases (diminished altruism), while a low rate of social discounting indicates that rewards maintain value as social distance increases (enhanced altruism).

Recent research on social discounting as an index of altruism indicates predicted relations with relevant real-world behaviors. Adolescent boys who exhibit aggression and bullying have exaggerated preference for outcomes for the self (compared to those without behavior

\* Corresponding author at: Department of Psychology, University of Maryland, 2103 Cole Activities Center, College Park, MD, 20742, United States.

E-mail addresses: [ryi1@umd.edu](mailto:ryi1@umd.edu) (R. Yi), [mpckover@memphis.edu](mailto:mpckover@memphis.edu) (A. Pickover), [alli.stuppy@gmail.com](mailto:alli.stuppy@gmail.com) (A.M. Stuppy-Sullivan), [sbaker@terpmail.umd.edu](mailto:sbaker@terpmail.umd.edu) (S. Baker), [RDLandes@uams.edu](mailto:RDLandes@uams.edu) (R.D. Landes).

problems; Sharp et al., 2012), resulting in high rates of social discounting. Also, pregnant women who continue smoking during pregnancy (resulting in potential health consequences to the baby) have higher rates of social discounting than women who quit upon discovering their pregnancy (Bradstreet et al., 2012).

Given these relations, approaches to reduce social discounting may have a positive impact on engagement in altruistic behaviors. Though established approaches to reducing social discounting are limited, the extensive literature on approaches to enhance self-control can inform approaches to enhance altruism. For the purpose of the present research, we consider the evidence on *episodic future thinking* (see reviews in Atance & O'Neill, 2001; Schacter, Addis, & Buckner, 2008). Episodic future thinking refers to the use of prospective imagery to concretely imagine oneself in future scenarios, and a developing body of evidence indicates that engagement in episodic future thinking reduces delay discounting (Daniel, Stanton, & Epstein, 2013a, 2013b; Lin & Epstein, 2014; Peters & Büchel, 2010). Applied to altruism, the use of prospective imagery to concretely imagine oneself in the scenarios of others could reduce social discounting. Indeed, previous research indicates that episodic simulations can enhance behaviors associated with altruism (Turner & Crisp, 2010; Turner, Crisp, & Lambert, 2007; see review in Gaesser, 2013). However, this body of research typically involves the impact of situation-specific simulations on intentions of behavior in those situations; for example, Gaesser and Schacter (2014) examined whether imagining helping someone in need increased intention to help that person. The first study reported here examined whether concrete, situation-independent imagery of another individual, rather than imagining altruistic behaviors one might exhibit towards that individual, increased altruism.

## 1. Study 1

The first study is a conceptual replication of the research examining episodic future thinking on delay discounting, applied to social discounting. Across two sessions, participants engaged in episodic thinking about others (experimental condition) or themselves (control condition) while completing a social discounting task.

### 1.1. Method

#### 1.1.1. Participants

Fifty undergraduate psychology students at the University of Maryland enrolled in the study for course credit. The recruitment target was informed by previous work (e.g., Peters & Büchel, 2010) as well as our ongoing work examining the effect of similar construal manipulations on delay discounting. Approximately half of the participants were randomized to experience the experimental condition first, with the remaining participants experiencing the control condition first. Data from five participants were excluded due to the following reasons: participant failed to follow instructions (three), research staff error (one), or data violated Johnson and Bickel's (2008) guidelines for systematic discounting (one). One participant provided usable data for only one (control) condition, and data in that condition was retained. Forty-four remaining participants provided complete datasets.

#### 1.1.2. Materials

Participants were given the following instructions, necessary for completion of the social discounting and episodic thinking tasks:

The following experiment asks you to imagine that you have made a list of the 100 people closest to you in the world ranging from your dearest friend or relative at position #1 to a mere acquaintance at #100. The person at number one would be someone you know well and is your closest friend or relative. The person at #100 might be someone you recognize and encounter but perhaps you may not even know their name.

You do not have to physically create the list – just imagine that you have done so.

**1.1.2.1. Social discounting task.** A computerized, titrating binary choice social discounting task, informed by Rachlin and Jones (2008) and using the algorithm of Du and colleagues (Du, Green, & Myerson, 2002), was administered to determine the subjective values of hypothetical money to be given to someone else at the following social distances: rank order of 1, 10, 20, and 100. In each trial, two outcomes were presented on the screen: \$100 for the “other” and a smaller amount for the self. The alternative for the self was titrated across six trials to determine the subjective values (i.e., indifference points) at each specific social distance. On the first of six trials at each social distance, the amount for the self was \$50. If the amount for the other was selected, the amount for the self was increased on the subsequent trial to \$75; if the amount for the self was selected, this amount was decreased to \$25. Over the remaining trials at each social distance, the amount for the self was increased or decreased in this manner, by half of the previous adjustment (e.g., 12.5% increase/decrease for trial 3). The indifference point (i.e., the present subjective value of the amount for the other) was calculated as the amount for the self following the sixth trial.

Before the start of the trials associated with each social distance, a block of episodic thinking questions was administered, using the same social distance qualifier (in the experimental condition only). The different “others,” representing different social distances, were presented in increasing order.

**1.1.2.2. Episodic thinking conditions.** Experimental condition: Participants completed four blocks of paper-and-pencil episodic thinking questions, designed to prime episodic, concrete thinking about another person. Each block was comprised of five fill-in-the-blank questions regarding specific events/activities (having lunch, visiting a website, engaging in a leisurely activity, and completing a task) of an “other”, rank ordered according to subjective closeness, at each of the following social distances: 1, 10, 20, 100. Some example questions were “What did/will this person have for lunch today?”, “Where did/will this person have lunch today?”, and “What did/will this person drink at lunch today?” The person (social distance) qualifiers coincided with the same social distances used in the social discounting task.

Control condition: Participants completed four blocks of questions as in the experimental condition, with the exception that questions were regarding activities of the self (e.g., “What did/will you have for lunch today?”, “Where did/will you have lunch today?”, and “What did/will you drink at lunch today?”). The questions were identical to the experimental condition, with the exception of the person qualifier (self rather than other). See Appendix A for all episodic thinking questions in both experimental and control conditions.

#### 1.1.3. Procedure

In a repeated-measures design, participants completed two 30-minute laboratory sessions separated by one week. Order was counterbalanced, such that half of the participants were randomly assigned to receive the sessions in the experimental-control order and half in the control-experimental order. In each session, the four blocks of episodic thinking questions were interweaved with the four social distances of the social discounting task. For example, in the experimental condition, a block of five episodic thinking questions about *person #1* was followed by assessment of social discounting for person #1; in the control condition, a block of five episodic thinking questions about the *self* was followed by assessment of social discounting for person #1. During each session, participants completed either the experimental or control episodic thinking manipulation, along with the computerized social discounting task. All measures and manipulations are fully reported here.

Download English Version:

<https://daneshyari.com/en/article/947666>

Download Persian Version:

<https://daneshyari.com/article/947666>

[Daneshyari.com](https://daneshyari.com)