

Intertemporal Choices in Decisions from Experience and Description

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Introduction

Intertemporal choices are tradeoffs between Larger benefits Later (**LL**) or Smaller benefits Sooner (**SS**) (Rae, 1843). Most studies in this field are based on descriptive hypothetical studies.

Three effects in intertemporal decision making

Common difference– adding the same duration to both alternatives results in increased preferences towards the LL option.

Magnitude– multiplying the rewards by the same scalar also results in increased preferences of the LL option.

Delay duration– multiplying the durations by the same scalar results in increased preferences of the SS option.

(Loewenstein & Prelec, 1992; Dai & Busemeyer, 2014).

Objective

We aim to explore people's decision making and the three effects in different environments: Descriptive, Description + experience and experience only using small scales of rewards and durations.

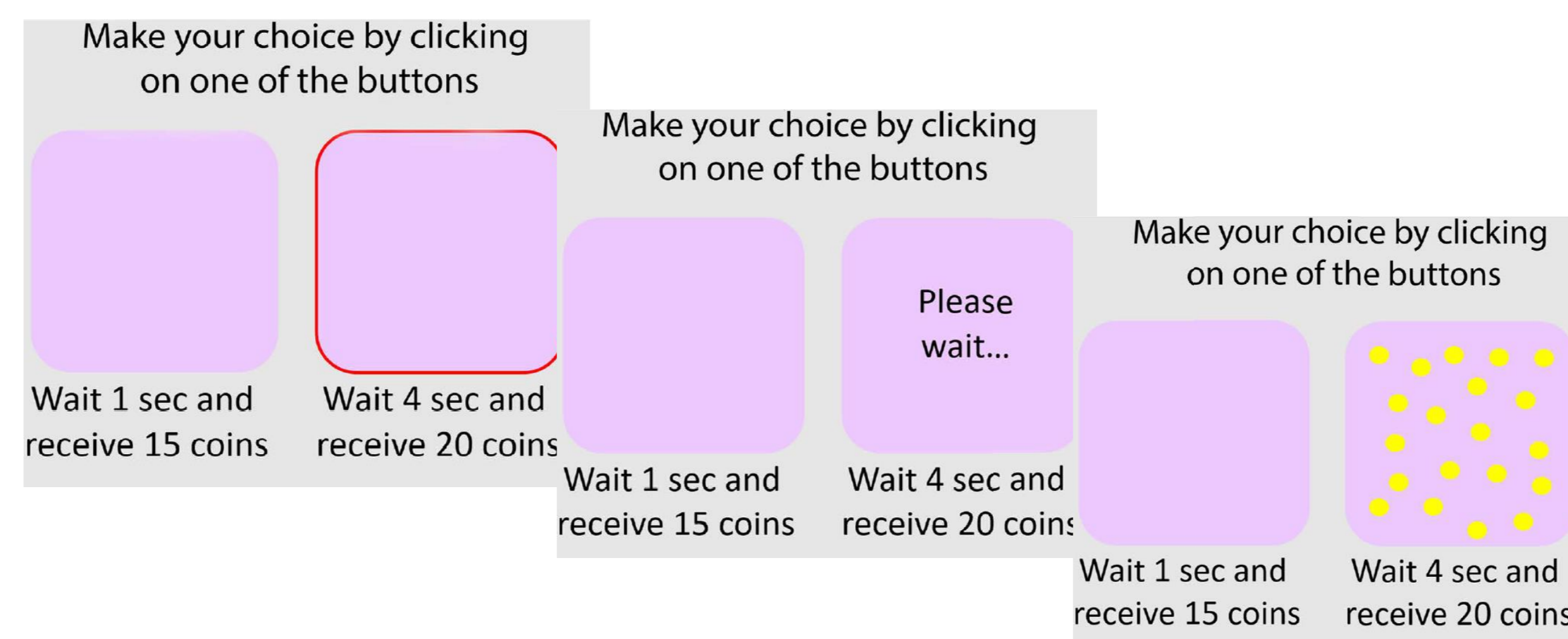
Methods:

Study 1: Descriptive only:

Online survey of descriptive hypothetical intertemporal tradeoffs. 12 problems using large scales of rewards and duration and 12 problems using small scales.

Study 2: Description + Experience:

Same small scales problems from study 1. Each question repeated for 40 trials.



Study3: Experience only:

Same paradigm as study 2 excluding the description for each tradeoff.

Results

Figure 1: Overall LL Choice Rates Across Studies 1, 2 and 3 (■) Including 1st Trial of the First Problem Played in Study 2 and 1st Trial Played in all Other Problems in Study 2 (▨).

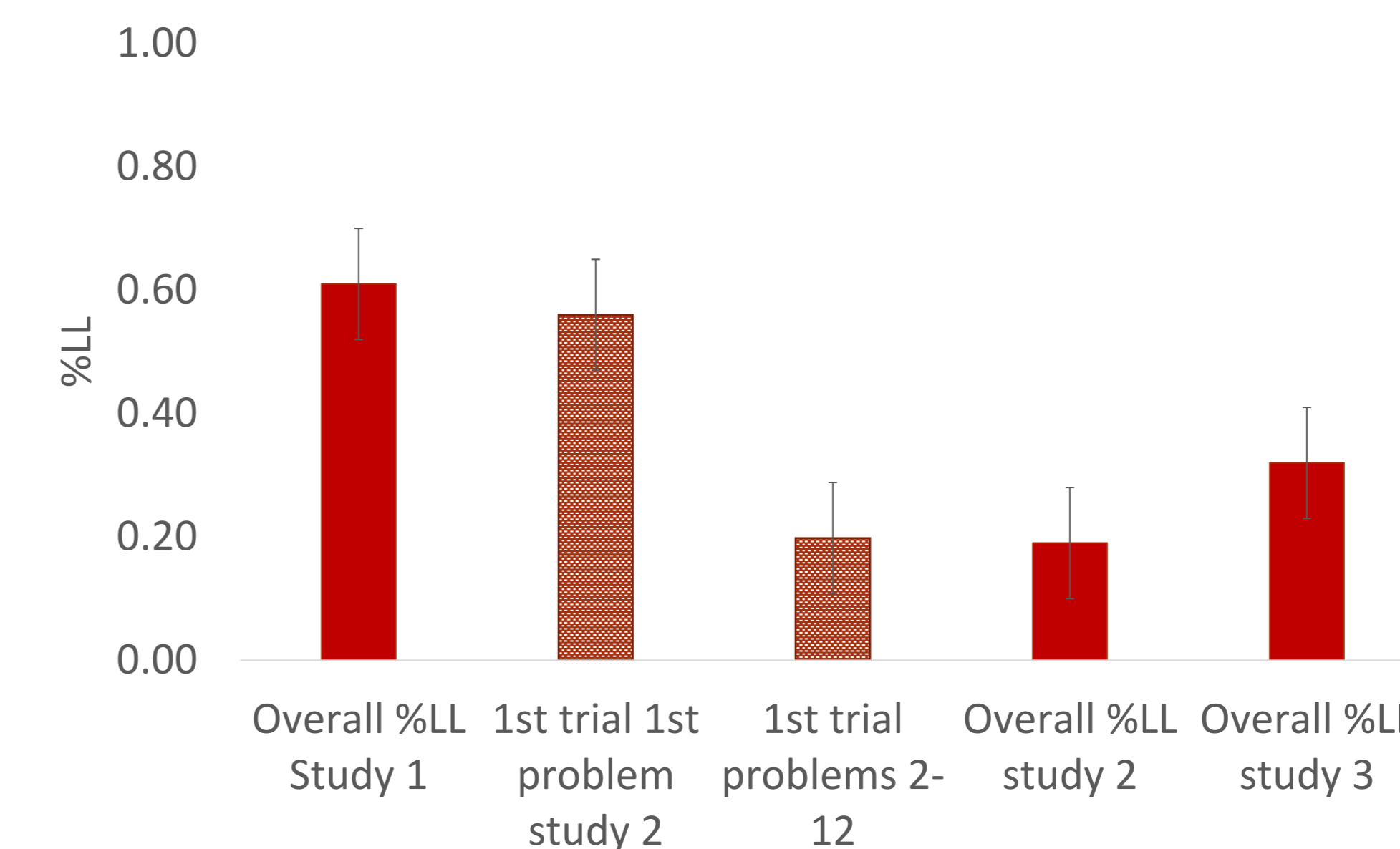
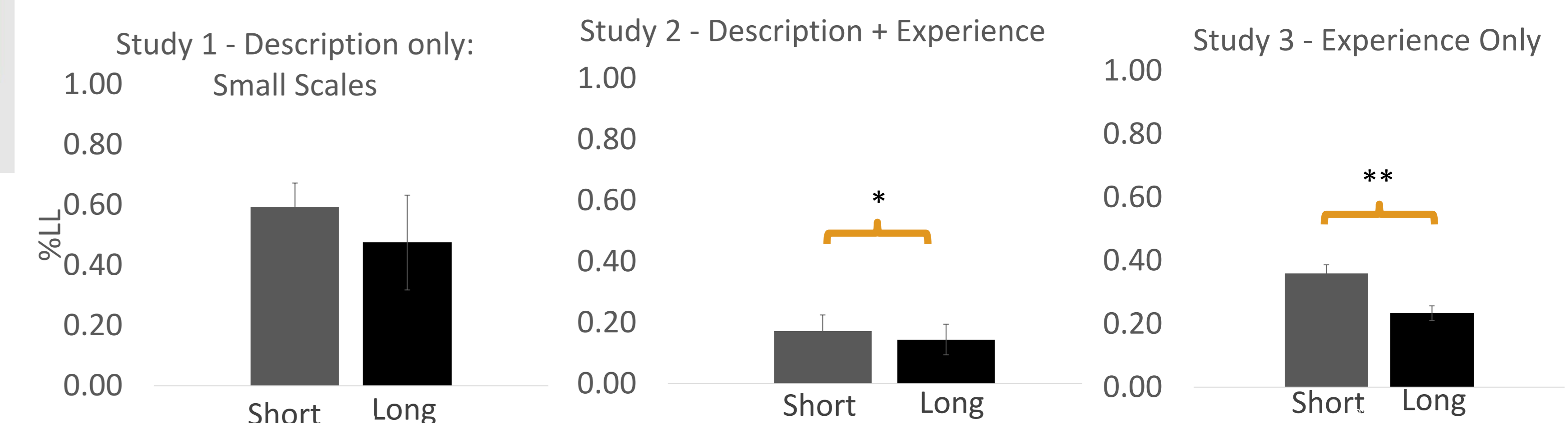


Figure 2: Sensitivity to duration in all studies.



The common difference, magnitude and delay duration effects were found significant in all studies.

Discussion

Our results demonstrate the robustness of the common difference, magnitude and delay duration effects. Additionally, we demonstrate a new description experience gap in deterministic intertemporal choices. LL choice rates varied across paradigms from highest (61%) in descriptive setting to lowest (19%) in Descriptive with experience setting. It seems, experiencing any small delays decreases willingness to wait.

References:

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- Rae J. The sociological theory of capital. 1834 Retrieved October 15, 2012 from <http://www.archive.org/details/sociologicaltheo00raej>.

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