

Sample of Level 2 English Editing

Field of research: Applied Psychology

Does nurture affect people's cue priority?

A re-examination of the ambiguity-ambivalence hypothesis
from a nature via nurture perspective

1. Introduction

Over the last three decades, empirical research on human cognition and decision-making behavior has shown a systematic bias toward decision behaviors, ~~which were~~as predicted by ~~the~~ expected utility theory, in a number of decision-making areas. It is needless to say that one of the pioneering studies in this field was performed by Kahneman and Tversky: on the framing effect in ~~the~~ life-death decision problems (e.g., Kahneman, D., & Tversky, A. 1979; Tversky, A. A., & Kahneman, D. 1981).

In their study, subjects were presented with a cover story ~~in~~ which explained that 600 people were suspected to be infected with a fatal Asian disease for which only two curative plans are available. Specifically, Plan A has a deterministic outcome, while Plan B has a probabilistic outcome. The deterministic outcome ensures the survival of one-third of the patients (i.e., 200 survivors), while the probabilistic outcome results in a one-third probability that all of the patients will survive, and a two-thirds probability that no one will survive. After the subjects read the cover story, they were asked to choose one of the two plans.

A classic demonstration of the framing effect, performed ~~done~~ by Tversky and Kahneman (Tversky, A. A., & Kahneman, D. 1981) is as follows: ; on the one hand, when this problem was represented in terms of saving lives (a “positive frame”), most subjects (72%) were risk-averse: the certain survival of 200 lives was more attractive than the risky choice, with ~~the a one-third~~ one-third chance of saving all 600 lives: ; ~~on the other hand, w~~ When this problem was represented in terms of losing lives (a “negative frame”), in contrast, most subjects (78%) favored the risky choice: the assured death of 400 people was less attractive than the two-thirds probability that 600 could die.¹

~~After Tversky and Kahneman's original work on framing effects,~~ a number of studies have been

¹ Since our study uses the life-death decision paradigm designed by Tversky, A. A., & Kahneman, D., (1981) to examine people's risk attitude, we follow the same (standard) definition of risk attitude as ~~theirs~~ they did. Suppose that you can get benefit (X_1) with a probability (p) and another benefit (X_2) with a probability ($1-p$): the expected value of benefit = $p * X_1 + (1-p) * X_2$. Given that you have an utility function (U), three arithmetic relations between $U(p * X_1 + (1-p) * X_2)$ and $p * U(X_1) + (1-p) * U(X_2)$ are possible. By using these formulas, human risk attitude is defined as follows:
if $U(p * X_1 + (1-p) * X_2) > p * U(X_1) + (1-p) * U(X_2)$, the choice is considered as risk-seeking;
if $U(p * X_1 + (1-p) * X_2) = p * U(X_1) + (1-p) * U(X_2)$, as risk-neutral;
if $U(p * X_1 + (1-p) * X_2) < p * U(X_1) + (1-p) * U(X_2)$, as risk-averse.

conducted to test the ~~re~~liability and generality of [Tversky and Kahneman's original work on framing effects](#). On the one hand, with the standard cover story, strong framing effects have been replicated not only in different kinds of respondents, such as university faculty, students, and physicians (McNeil, B., et al. 1982) but also in various applied areas (Burton, S., & Babin, ~~L.A.A.~~ 1989; Kramer, ~~R.M.R.M.~~ 1989; Travis, ~~C.B.C.B.~~, et al. 1989). On the other hand, some studies have shown little or no framing effects when the context or cover story was manipulated. This suggests that the framing effect may not be a general and robust choice phenomenon, and that it is sensitive both to the context in which the problem is described (Fagley, ~~N.S.N.S.~~, & Miller, ~~P.M.P.M.~~ 1987; Schneider, S. L. 1992; Wang, X. T., & Johnston, V. S. 1995; Wang, ~~X.T.X.T.~~ 1996a, b; Wang, ~~X.T.X.T.~~, et al. 2001) and to various cognitive and social variables (Shoorman, ~~F.D.F.D.~~, et al. 1994; Miller, P. M., & Fagley, N. S. 1991; Roszkowski, M. J., & Snelbecker, G. E. 1990).

Given the above results, it is important to explain *systematically* the appearance and disappearance of the framing effect. The ambiguity–ambivalence hypothesis ~~seems~~ [appears](#) to be one interesting attempt to achieve this purpose, since the hypothesis seems to give a theoretical platform to previous researches showing the sensitivity of the framing effect. However, we think this platform admits of some improvement. The main purpose of our study is to insist that in order to understand the choices that people make in ~~the~~ [life and death decision problems](#), it is important to incorporate not only nature—people's ~~inherent~~ [inherent](#) ~~it~~ bias—but also nurture—~~their~~ [their](#) group experience in real life—into the ambiguity–ambivalence hypothesis. To [help](#) achieve this goal, [Section 2](#) explains ~~an~~ [the](#) essence of the ambiguity–ambivalence hypothesis. [Section 3](#) presents our original idea—the—“nature via nurture” perspective—and argues that this perspective is important for the development of this hypothesis. [Sections 4 and 5](#) show [the](#) results of two experiments that were performed to verify ~~a~~ [the](#) validity of [the](#) above argument. In [Section 6](#), we conclude with a summary and discussion of these results and implications.

2. Size effects and disappearance of [the](#) framing effect: [the](#) Ambiguity–ambivalence hypothesis

Due to the close relation of the ambiguity–ambivalence hypothesis to the discovery of the size effect, we begin with a brief literature review concerned with the size effect ~~ion~~ on human cognition. The general importance of group size as a variable affecting human cognition and ~~decision-~~ [making](#) [decision-making](#) has been widely recognized.

A considerable number of studies in both cognitive and social psychology ~~have~~ [clarified](#) that our cognitive processes are frequently influenced by our sense of group membership (e.g., Brewer, ~~M.B.M.~~ [B.](#) 1979; Tajfel, H. 1970, 1981). Moreover, in a series of experiments involving a public goods provision (or social dilemma) game, significant group size effects were found in subjects' cooperative behavior (e.g., Messick, ~~D.M.D.M.~~ [—](#) 1973; Marwell, G., & Ames, R. E. 1979; Bonacish, P., et al. 1976).