The Influence of Framing and Processing Fluency on the Estimates of Conjunctive Events

Ahmad Daryanto, Lancaster University, UK
Peter Hampson, Northumbria University, UK

Many events in life constitute conjunctive events (e.g., getting tenure). A conjunctive event consists of more than a simple event (e.g., getting a paper published). The likelihood of a conjunctive event is the probability that all simple events occur. Past research has examined how people interpret the probability occurrence of the conjunctive events (e.g., Bar-Hillel, 1972; Brockner et al. 2002; Mandel, 2008). For instance, Bar Hillel (1973) has found that people overestimate the likelihood of conjunctive events. Research by Brockner et al. (2002) demonstrates that promotion-focused individuals may do better at estimating conjunctive events than prevention-focused individuals. The present research aims at extending the previous research. We posit that estimates of a conjunctive event may be affected by the framing of its simple events (i.e., gain e.g., accepted vs. loss, e.g., not rejected) and the effect is mediated by processing fluency. We aim at making contribution to framing and consumer decision making literature

[to cite]:

[url]:
http://www.acrwebsite.org/volumes/1009345/volumes/v39/NA-39

copyright notice]:
This work is copyrighted by The Association for Consumer Research. For permission to copy or use this work in whole or in part, please contact the Copyright Clearance Center at http://www.copyright.com/.
download as quicker than did participants exposed to the red background screen. The empirically examined consequence differences between brief exposure to red versus blue (green) result from different learned associations, which are likely to activate different motivations (approach vs. avoidance) and possibly different levels of relaxations (Meth and Zhu 2009; Elliot et al 2007; Gorn et al 2004). In line with prior research, we propose that compared to individuals briefly exposed to red, individuals briefly exposed to blue have higher impulsive buying intent in general.

Two experimental studies were conducted among several hundred subjects to test our hypothesis using both online and traditional paper-and-pencil surveys. In experiment 1, 68 participants were randomly assigned to one of the two between-subjects experimental conditions: the red condition or the blue condition. The study was conducted by an experimenter blind to the experimental hypothesis. Impulsive purchase decision served as the dependent measure. The impulsive purchase decision measure was used and justified by Rook and Fishier 2004. An imaginary shopping situation was provided and participants were asked to make a purchase choice out of five purchase decision alternatives ranging from low to high impulsiveness. Participants assigned to the red condition filled up a survey printed in red paper whereas participants assigned to the blue condition filled up a survey printed in blue paper. The two groups were asked to fill in the paper-and-pencil survey starting with some filler questions first, followed by the dependent measure and demographic information. A unifactorial (color condition: red vs. blue) between subjects analysis of covariance was conducted on impulsive purchase decision. The analysis revealed an effect of color on impulsive purchase decision, F(1, 66)=5.10, p<.05. More specifically, consistent with our hypothesis, participants in the blue condition achieved higher impulsiveness on specific impulsive purchase decision (means=3.16 vs. 2.44).

In experiment 2, we verified our findings by conducting an online survey. Rather than to fill up a paper-and-pencil survey respectively in red or blue, 122 participants were randomly assigned to fill up an online survey respectively with blue or red computer background screen. The procedure was similar with the first experiment. Similarly a unifactorial (color condition: red vs. blue) between subjects analysis of covariance revealed an effect of color on impulsive purchase decision, means=2.87 vs. 2.45; F(1, 120)=3.71, p=.05. In sum, in this study, through two experiments, conducted among almost 200 participants, we consistently found that color (blue vs. red) did influence individual’s impulsive buying behavior. Specifically, compared to individuals briefly exposed to red, individuals briefly exposed to blue had higher impulsive buying intent. The findings suggest that color can serve as an important environmental cue that has large impact on consumer impulsive buying behavior. Our findings contribute to the literatures both on consumer impulsive buying behavior and color psychology. Also our findings have practical implications on how to help retailing stores to create an environment to enhance consumer impulsive buying and also bring up the question that whether Santa Clause still wears red in the large shopping malls when the shopping spree season comes.

REFERENCES

The Influence of Framing and Processing Fluency on the Estimates of Conjunctive Events

Ahmad Daryanto, Lancaster University, UK
Peter Hampson, Northumbria University, UK

Many events in life constitute conjunctive events (e.g., getting tenure). A conjunctive event consists of more than simple event (e.g., getting a paper published). The likelihood of a conjunctive event is the probability that all simple events occur. Past research has examined how people interpret the probability occurrence of the conjunctive events (e.g., Bar-Hillel, 1972; Brockner et al. 2002; Mandel, 2008). For instance, Bar Hillel (1973) has found that people overestimate the likelihood of conjunctive events. Research by Brockner et al. (2002) demonstrates that promotion-focused individuals may do better at estimating conjunctive events than prevention-focused individuals. The present research aims at extending the previous research. We posit that estimates of a conjunctive event may be affected by the framing of its simple events (i.e., gain e.g., accepted vs. loss, e.g., not rejected) and the effect is mediated by processing fluency. We aim at making contribution to framing and consumer decision making literature.

Recent research has examined a strict refocusing framing effect (Mandel, 2008), which refers to the description of a conjunctive event as consisting a series of simple event framed as either a gain or loss (e.g., two acceptances out of three paper submissions or its complementarity of one rejection out of three paper submissions). Despite extant research on framing, strict refocusing framing effect was paid little attention. The main aim of the present research is to examine the effect of strict refocusing framing on the estimation of conjunctive events.
SIGNIFICANCE AND IMPLICATIONS OF THE RESEARCH

In this study, we examine how people’s judgment on the probability of a conjunctive event influences their subsequent inference (e.g., after successfully getting five papers accepted what is the probability of getting tenure?). Our study demonstrates that a conjunctive event that contains series of success events was judged more probable if they were supported with positive evidence, whereas its complementary event that contains a series of failure events was judged more probable if they were supported with negative evidence. We provide support for our theory in an empirical setting involving hypothetical scenarios. We study the role of processing fluency as a cognitive mechanism of the strict refocusing framing effect and test the prediction in more naturalistic settings.

To test our prediction, we designed a 2 x 2 between-subjects experiment in which we manipulate frame (success vs. failure) and base rate information (33% vs. 67%). This prediction was tested in a study involving hypothetical scenarios. A total of 104 undergraduates (49 men and 55 women) participated in the study. Participants in the success condition read information about the chance of selling a product in the first week of employment of a new salesperson who has never participated in a sales training program before joining a company. Next, they read a paragraph about Linda, who is a new employee of a company X. During the first week of her employment, she has contacted six customers where four of them had decided to buy one unit product each from Linda (coded as event A). Participants in the failure condition read the negation of event A (i.e., two of them had decided not to buy from Linda. In all four conditions, the probabilities of the events are exact, which can be calculated from binomial trials. After reading the scenario, participants indicated their subjective probability regarding the chance that Linda had participated in a sales training program before joining the company by putting a cross (X) in a single line mark as 0% or never in one end and 100% or certain in the other end. These responses were transformed to probabilities by taking the ratio of the length of the marked line from origin with the total length of the line. We also included items for measuring message processing, and processing fluency using 7-point scale, anchored by strongly disagree [1] and strongly agree [7].

RESULTS

With regard to frame, the results show a non-significant difference between the gain (M_{gain} = 0.53, SD=0.17) and loss (M_{loss} = 0.61, t(97)=0.165, p>0.05). With regard to base rate, the results show a significant difference between the low base rate (M_{low} = 0.61, SD=0.17) and high base rate (M_{high} = 0.53, SD=0.17, t(97)=2.12, p<0.05). This result highlights respondents’ subjective judgments were affected by the base rate, i.e., the chance of occurrence of one event. A 2 (frame: gain, loss) x 2 (base rate: p=0.33, p=0.67) ANOVA revealed the frame x base rate interaction on the subjective probability judgment (F(1,99)=4.7, p=0.036). Contrast analysis shows that, albeit the four events are equally likely, participants’ subjective judgment is higher when presented event A (i.e., where the probability of making one success is low and the information regarding Linda’s performance is described in gain) than its negation of event ~A (i.e., where the probability of making one failure is low and information regarding Linda’s performance is described in loss). In contrast, participants’ subjective judgment were higher when they read event ~B (i.e., where the probability of making one failure is low and the information regarding Linda’s performance is described as a loss) than event B (i.e., where the probability of making one success is high and the information regarding Linda’s performance is described as a gain). To examine the role of processing fluency as a potential mediator of the framing effect, a structural equation model was developed. Our results confirmed our hypotheses.

GENERAL DISCUSSION

Our study examines people’s subjective probability judgment on the estimates of conjunctive events that consists of an independent series of simple events. The results of our empirical study confirm our prediction and extend previous findings of Brockner (2002) and Mandel (2008). Further research is needed to generalize the findings to another consumer research setting (e.g., estimates of resolving product complaints after filing five complaints).

REFERENCES


Why Retail Therapy Works: It is Choice, Not Acquisition, That Primarily Alleviates Sadness

Beatriz Pereira, University of Michigan, USA
Scott Rick, University of Michigan, USA

People often engage in shopping activities when feeling sad. Indeed, folk wisdom suggests that negative affect can be healed by going shopping, a phenomenon labeled as retail therapy (Underhill 1999, Gardner and Rook 1988, Atalay and Meloy 2011). Although it is increasingly clear that sadness stimulates spending (e.g., Cryder et al. 2008; Lerner, Small and Loewenstein 2004), it is less clear whether and why shopping actually helps to alleviate negative affect.

Answering the question of whether retail therapy “works” is complicated by the fact that the shopping experience consists of several components (e.g., browsing, choosing, acquiring, and consuming), some of which may be more hedonically influential than others. Previous qualitative work in marketing suggests that consumers might shop in an effort to regain a sense of control over their life (e.g., Pavia and Mason 2004), which is somewhat ironic given that the act of spending while sad is itself often viewed as a loss of self-control (cf. Faber and