

Rapid Communication

Online versus Conventional Shopping: Consumers' Risk Perception and Regulatory Focus

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ABSTRACT

In two experiments, the impact of shopping context on consumers' risk perceptions and regulatory focus was examined. We predicted that individuals perceive an online (vs. conventional) shopping environment as more risky and that an online shopping environment, by its risky nature, primes a prevention focus. The findings in Study 1 demonstrate these effects by using self-report measures for risk perception and prevention focus. In Study 2, we replicated these findings and demonstrated that the effect of an online shopping environment carries over to behavior in a domain unrelated to shopping.

INTRODUCTION

RISK PERCEPTION REGARDING the Internet is identified as a primary obstacle to the future growth of e-commerce and is one of the main predictors of consumers' decisions to shop in an online or a conventional store.¹ We propose that to more fully understand online consumer behavior, investigators should take the perceived risky nature of online shopping into account and focus on the prevalent motivations and drives of consumers once they enter the online environment. We argue that because of the inherent risks of online shopping, avoiding losses rather than achieving gains may become the consumers' prime goal. Higgins's regulatory focus theory² states that a different psychological system operates when the goal is loss-avoidance rather than

achieving gains. Promotion-focused self-regulation is concerned with the absence or presence of positive outcomes, whereas prevention-focused self-regulation is concerned with the absence or presence of negative outcomes and with safety. Accordingly, we expect online (vs. conventional) shopping, by its risky nature, to induce a prevention-focused self-regulation among consumers. In Study 1, these hypotheses are tested using self-report measures of risk perception and prevention focus. Since research has shown that store reputation can affect risk perception,³ we also manipulated store reputation to hold constant the reputation of the store the participants had in mind. Study 2 aimed to replicate and further corroborate the findings of Study 1 by showing that the effect of shopping environment carries over to behavior in an unrelated domain.

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STUDY 1

Method

Participants, design and procedure. Participants were 91 students (44% male, mean age 19.94 ($SD = 2.41$)). The study involved a 2 (shopping environment: conventional vs. online) \times 2 (store reputation: reputable vs. nonreputable) between-subjects factorial design. The participants first completed scales to measure perceived Internet and digital knowledge, prior online purchase behavior, and Internet usage. Next, they imagined a situation in which they were shopping in either a reputable or nonreputable online or conventional store. The participants then completed the risk perception and prevention focus scales.

Manipulation checks. As a manipulation check, participants rated whether the store they had in mind was an online store and whether it was reputable (3 items, $\alpha = 0.87$).

Risk perception. Risk perception was assessed with 9 items ($\alpha = 0.87$), partially based on Jarvenpaa and Todd.⁴ Participants were asked to estimate the chance, on a 5-point scale (1 = small chance, 5 = great chance), that a certain risk (e.g., purchased goods and services will not meet the expectations) would emerge.

Self-reported prevention focus. Prevention-related items from a scale developed by Lockwood et al.⁵ were rephrased to indicate variations in situationally induced prevention focus. Example items included "When shopping in an (online or conventional) store, I am focused on negative outcomes." The scale consisted of 8 items ($\alpha = 0.82$), all rated on a 5-point scale (1 = not at all true of me, 5 = very true of me).

Results

Manipulation checks and covariates. Sixteen participants did not have the correct shopping environment in mind and were excluded from all analyses. Store reputation was successfully manipulated: participants in the reputable (vs. nonreputable) store condition evaluated the reputation more favorably ($M_{reputable} = 5.47$, $SD = 0.96$ vs. $M_{nonreputable} = 3.71$, $SD = 1.18$; $F(1,73) = 49.01$, $p < 0.001$, $\eta^2 = 0.40$). Only perceived Internet knowledge did correlate with self-reported prevention focus ($r(75) = -0.244$, $p = 0.04$).

Risk perception. A 2 (online vs. conventional) \times 2 (reputable vs. nonreputable) ANOVA was conducted with the mean risk perception score as the dependent variable. As predicted, participants find online shopping more risky than conventional shopping ($M_{online} = 2.89$, $SD = 0.64$ vs. $M_{conventional} = 2.24$, $SD = 0.67$; $F(1,71) = 14.79$, $p < 0.001$, $\chi^2 = 0.17$). Furthermore, shopping in a nonreputable store was perceived as more risky than shopping in a reputable store ($M_{nonreputable} = 2.76$, $SD = 0.77$ vs. $M_{reputable} = 2.36$, $SD = 0.59$; $F(1,71) = 6.26$, $p = 0.02$, $\eta^2 = 0.08$). No interaction effect was found.

Self-reported prevention focus. A 2 (online vs. conventional) \times 2 (reputable vs. nonreputable) ANCOVA with the prevention focus scale as the dependent variable and Internet knowledge as a covariate showed only a main effect of shopping environment. Participants in the online condition were more prevention focused than in the conventional condition ($M_{online} = 2.69$, $SD = 0.67$ vs. $M_{conventional} = 2.36$, $SD = 0.74$; $F(1,70) = 5.05$, $p = 0.03$, $\eta^2 = 0.07$). Mediation by risk perception was significant according to the Sobel test: $z = 2.18$, $p = 0.03$.

Summary and discussion

The findings show that online (vs. conventional) shopping, by its risky nature, induces a prevention focus. To sustain these findings in Study 2, we assessed prevention focus in an implicit and nonobtrusive way. Following Zhou and Pham,⁶ we expect that the prevention focus primed by online shopping carries over to a seemingly unrelated task. To test this hypothesis, we used a procedure similar to the one used by Shah et al.⁷ They asked participants to complete an anagram task in which either the potential gains (i.e., promotion) or the potential losses (i.e., prevention) of the anagram score were made salient. Their findings show that a fit between individuals' regulatory focus and task instruction results in a better performance. In a similar vein, we expect that individuals in the online shopping environment condition perform better on a prevention-framed (vs. promotion-framed) anagram task.

STUDY 2

Method

Participants and procedure. Seventy-seven students participated (19% male, mean age 22.8, $SD = 2.33$). Four students did not complete the test and were excluded from the analyses. The shopping en-

vironment manipulation and the risk perception and self-reported prevention focus scales were similar to those in Study 1. Next, we tested whether the effect spills over to a seemingly unrelated anagram task.⁶ Participants were randomly assigned to the prevention or promotion task condition. The dependent measure was performance on solving 10 anagrams, calculated by the number of correct answers (maximum 28).

Results

Risk perception and self-reported prevention focus. Again, the participants in the online condition perceived shopping as more risky ($M_{online} = 2.90$, $SD = 0.68$ vs. $M_{conventional} = 1.83$, $SD = 0.41$; $F(1,71) = 65.37$, $p < 0.001$, $\eta^2 = 0.48$) and were more prevention focused according to the prevention focus scale ($M_{online} = 2.83$, $SD = 0.65$ vs. $M_{conventional} = 2.28$, $SD = 0.66$; $F(1,71) = 12.94$, $p < 0.001$, $\eta^2 = 0.16$). The effect on self-reported prevention focus was again mediated by risk perception ($z = 4.36$, $p < 0.001$).

Task performance. A 2 (online vs. conventional) \times 2 (prevention- vs. promotion-framed anagram instruction) ANOVA with the anagram score as the dependent variable yielded only the predicted interaction effect, $F(1,69) = 4.13$, $p = 0.05$, $\eta^2 = 0.06$. Simple effects analysis revealed that the effect of task instruction was significant in the online shopping condition, $F(1,69) = 5.26$, $p = 0.03$, $\eta^2 = 0.07$ ($M_{prevention} = 19.50$, $SD = 2.55$ vs. $M_{promotion} = 17.50$, $SD = 3.29$) but not in the conventional shopping condition, $F < 1$. Risk perception did not mediate this effect.

GENERAL DISCUSSION

The present findings indicate that consumers' risk perception is more than just a motive that underlies decisions to shop in an online or a conventional store. Both self-report and implicit measures show that by its risky nature, online shopping evokes prevention-focused self-regulation. Interestingly, experienced online shoppers do not stop perceiving the Internet as a risky shopping channel and are as prevention focused as the inexperienced shoppers.

Since prevention-focused (vs. promotion-focused) self-regulation is known to affect consumer

information processing and choice,⁶ the findings have implications for theories about online consumer behavior. For example, the kind of information that online consumers search for might be affected by their prevention focus. Whereas the natural tendency of a marketer is to stress positive product features, in an online store it may be wise to stress the absence of negative features, since this fits the predominant regulatory focus of the online consumer. Future research should focus on what kind of online information is persuasive given that online consumers may be relatively more prevention focused.

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