

Navigating the Waters: Regulating versus Using Feelings Toward Risky Choices

Eugene Chan, University of Toronto, Canada
Najam Saqib, Qatar University, Qatar

EXTENDED ABSTRACT

Research on how people's feelings toward risky choices affect such choices has been of interest in the past 30 years (Loewenstein et al. 2001; Slovic et al. 2004). We draw upon two streams of research on affect regarding non-risky choices and apply them to risky ones. One stream suggests that people take actions to balance or repair their feelings, known as "affect regulation" (Manucia, Baumann, and Cialdini 1984; Isen 1987), while another stream suggests that people use their feelings as informational input, known as "affect-as-input" (Mayer et al. 1992; Schwarz and Clore 1983). We extrapolate these two streams' predictions regarding *non-risky* choices to make predictions regarding *risky* choices.

People who regulate their feelings make choices that produce a favourable affective outcome. They thus aim to avoid negative outcomes. Over risky gains, which produce positive feelings about possible benefits from taking risks, they avoid risks to prevent losses from accruing and to keep their feelings "in check". Similarly, over risky losses, which produce negative feelings about possible dangers, they would avoid risks for the same reason. By taking risks but losing, the counterfactual that they could have won with certainty would be unfavourable. As such, we predict that people who regulate their feelings *fear* the worst possible outcome that could come from taking risks – over both gain and loss domains. Meanwhile, people who use their feelings use them as a sign about possible directions to take. Positive feelings signal that "everything is okay" but negative ones signal that "something is wrong". Over risky gains, they consider positive feelings toward possible benefits as a sign that they can accrue possible gains, suggesting risk-seeking. Over risky losses, they consider their negative feelings toward possible dangers as a sign that something needs to be done to avoid possible losses, again suggesting risk-taking. As such, we predict that people who use their feelings *hope* for the possible outcome that could come from taking risks – over both gain and loss domains.

Five experiments support our hypothesis. In Experiments 1A and 1B, we primed participants to regulate or use their feelings by having them think affectively or analytically, respectively (Hsee and Rottenstreich 2004). Participants primed to regulate their feelings preferred the certain option in the Asian disease problem (Experiment 1A; Tversky and Kahneman 1981) and were more likely to sell their shares in a hypothetical stock scenario in the disposition effect (Experiment 1B) than participants primed to use their feelings. These findings were consistent over both gain and loss domains (Experiment 1A; Figure 1) and whether the stock portfolio increased or decreased (Experiment 1B; Figure 2).

In Experiment 2, we used a different manipulation of regulating and using feelings. People thinking concretely regulate their feelings, while people thinking abstractly use them, due to the affective feedback loop that exists in concrete but not abstract mindsets (Kivetz and Kivetz, *forthcoming*). We thus primed participants with a concrete or abstract mindset. In a hypothetical gamble between winning \$500 and a 50% chance of winning \$1,000, or between losing \$500 and a 50% chance of losing \$1,000, participants primed to regulate their feelings prefer the certain option more over both gain and loss domains than participants primed to use their feelings (Figure 3).

Experiments 3 and 4 shed light on the hypothesized emphasis on fear and hope from regulating or using feelings, respectively. In Experiment 3, we measured participants' tendencies to regulate or

use their feelings using the Negative Mood Regulation scale (NMR; Catanzaro and Mearns 1990). Participants took part in a hypothetical lottery similar to Experiment 2. However, before they made their choices, they wrote about what they would do and feel if they either "win" or "lose" by taking the risky option. Findings replicated those from Experiment 2. Participants who regulated their feelings wrote about the worst possible outcome, while those who used their feelings wrote about the best possible outcome – again, over both gain and loss domains. This suggests an emphasis on fear and hope, respectively.

Finally, Experiment 4 used a word-association task to measure participants' tendencies to regulate or use their feelings. First, participants wrote down the first word that came to mind in response to negatively-valenced words such as *cancer*. Then, they wrote down words in response to neutral words such as *chair*. We coded responses on this second task as either positive or negative, as a proxy for regulating or using feelings. Participants indicated their subjective happiness towards winning or losing a series of money from \$100 to \$1,000. We fitted a regression model in each gain/loss domain for participants who regulated/used their feelings, and included the squared subjective happiness to assess the second-order curvature of participants' utility curves (Figure 4). Participants who regulated their feelings had concave curves, while those who used their feelings had convex curves. These findings suggest risk-aversion and risk-seeking, respectively, over both gain and loss domains.

This research suggests that people who regulate their feelings are risk-averse while those who use them are risk-seeking over both gain and loss domains. This is likely due to the emphasis on fear or hope from taking risks, as Experiments 3 and 4 suggest. We offer an implication for prospect theory: people are risk-averse over gains because they regulate their feelings, but people are risk-seeking over losses because they use those feelings. Our findings bridge research distinguishing between affect regulation and affect-as-input, with that on risky decision-making. Our findings also encourage future research to focus more on anticipated than current feelings. That is, they should emphasize the "prospect" in prospect theory.

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