

MOOD, GENDER, AND SITUATIONAL INFLUENCES ON RISK-TAKING ADVICE FOR OTHERS

RENEE E. MAGNAN AND VERLIN B. HINSZ

North Dakota State University, Fargo, ND, USA

The influences of mood and gender on the level of risk taking that people advise for others was examined. Music was used to create positive and negative moods in male and female participants who were asked to give risk-taking advice to others for typically cautious and risky situations. As expected, the influence of mood and gender on advice for risk decisions was dependent on the nature of the situation and on whether the situation was considered risky or cautious. How the individuals react to the situation at hand may be more predictive of the outcome than mood or gender. In addition, the relevance of the situation to the individual may also change how mood and gender influence risk advice for others.

Keywords: risk-taking advice, mood, gender, situational influences.

Decision making is a critical feature of most adults' personal and professional lives. A variety of important consequences result from the quality of decisions that individuals make. Although there is substantial research on individual decision making (e.g., Connolly, Arkes, & Hammond, 2000; Plous, 1993), much less attention has been given to the advice individuals give others facing important decisions (Sniezek & Buckley, 1995; Sniezek & Van Swol, 2001).

Renee E. Magnan and Verlin B. Hinsz, Department of Psychology, North Dakota State University, Fargo, ND, USA.

Preparation for this manuscript was supported by grants awarded to the second author from the National Institute of Mental Health (1R15-MH63734), the National Science Foundation (BCS-9905397), and the Air Force Office of Scientific Research (F49620-02-1-0234). Data for this study were gathered by Michael Sjomeling. The authors thank Dana Lawrence, Ernest Park, Gary Nickell, and various reviewers for comments made on earlier drafts of the manuscript.

Appreciation is due to reviewers including: Nathan Kogan, PhD, Department of Psychology, New School University, New York 10003, USA, Email: kogann@newschool.edu; Irwin Levin, PhD, Department of Psychology, University of Iowa, 11 Seashore Hall E, Iowa City 52242-1407, USA, Email: irwin-levin@uiowa.edu; Kenneth Yuen, PhD, Department of Psychology, University of Hong Kong, Hong Kong, People's Republic of China, Email: h9701585@hkusua.hku.hk

Please address correspondence and reprint requests to: Renee Magnan, Department of Psychology, North Dakota State University, Fargo, ND 58105-5075, USA. Email: renee.magnan@ndsu.nodak.edu

Because decision makers often seek and consider the advice of others, it is important to determine the factors that influence how decisions about advice for others are made and how these decisions resemble decisions made for oneself. In this study, we examined how the advisor's general mood, the gender of the advisor, the cautious or risky nature of the decision situation, and specific features of the decision situation influence the amount of risk an advisor recommends an individual should take when facing a critical decision situation.

MOOD AND DECISIONS

There is an emerging literature in which the influences of decision makers' mood on their decisions are considered (e.g. Forgas, 1995; Isen, 1993). A number of conceptualizations of mood and emotions have been applied to help explain their influences on decisions (Schwarz, 2000). For example, Loewenstein and Lerner (2003) describe two types of affective influences that appear to play a role in decision making: immediate emotions and expected emotions. When a person makes a decision based on immediate emotions, he/she takes into account the emotions experienced at the time the decision was made. When a person makes a decision based on expected emotions, he/she attempts to predict the emotional consequences associated with each course of action (Mellers & McGraw, 2001).

Mood influences on decision making are also affected by the degree of risk involved with the decisions. When in positive moods, decisions are riskier when the likelihood is high that success can be achieved, but not when the potential for loss is great (Isen, 1987). Isen and Patrick (1983) found that when positive mood was induced, participants bet greater amounts with a high probability of winning compared to a low probability. In addition, Deldin and Levin (1986) found that in hypothetical situations, positive mood led to riskier decision making. In contrast, the effects of negative moods have been less clear. Some researchers have found negative mood to result in less risk-taking behavior (Deldin & Levin), but others have found an increase in risk taking with negative mood (Mano, 1992).

Another way that mood may influence decisions is in terms of the heuristic and systematic strategies used in processing information (Forgas, 1995). A negative mood can signal the presence of a problem which implies that the decision maker should engage in more systematic processing of the information through use of rational strategies. On the other hand, positive moods can signal the absence of a problem and so the decision maker can use more heuristic strategies which require less elaboration of the information (Schwarz & Clore, 1996). Although research regarding these strategies has been focused on social judgments, the pattern of findings has implications for how mood might influence the strategies used to process information relevant for giving risk advice to other decision makers. However, it is difficult to construct a priori predictions regarding the advice given to others because characteristics of the decision situation often determine the

degree of risk involved for the decision. The information available for systematic or heuristic processing is also dependent on the characteristics of the decision situation. Although there is evidence regarding mood influences on decision makers, it is not clear if the same reasoning applies for decisions about advice given to other decision makers. In addition to mood and situational influences, individual differences may play a role in decision making. Specifically, gender may affect whether a person advises another to make a risky or cautious decision.

GENDER INFLUENCES ON RISK TAKING

The influence of gender on risk taking has generally been considered independent of mood. For example, sociobiological theory suggests that decisions to engage in risky behavior can be attributed to different selective pressures producing distinct male and female behavioral strategies (Wilson & Daly, 1985). Male fitness is limited by access to fertile females, while female fitness is limited to physiological and energetic restraints. That is, the different mating strategies may play a role in risky behavior differences between men and women. Accordingly, gender differences should not arise in all situations (i.e., Cecil, 1972; Wallach & Kogan, 1959). However, if differences do occur, men will tend to take more risks than will women. In a meta-analysis examining gender differences over a variety of risk-taking activities, men were more inclined to engage in risk behaviors than were women (Byrnes, Miller, & Schafer, 1999). Interestingly, the gender gap across these studies grew smaller from 1964-1980 to 1981-1997.

In contrast, the risk-as-value hypothesis suggests that gender differences will not vary across situations (Byrnes et al., 1999). Because men have a naturally lower level of arousal and because they tend to believe that risk taking is viewed positively by society, they are more motivated to behave in a riskier manner. Accordingly, men should always be more inclined to engage in risky behavior than women, regardless of the situation. This prediction does not appear to be entirely supported because men may place a higher value on risk in certain situations, but not always. Kogan and Dorros (1978) found that risk taking for men was greater in certain situations, while other situations yielded greater risk taking for women. The direction was dependent upon the values that existed in the specific situation. Consequently, the risk-as-value hypothesis may need to be amended to consider values that may be specific for males and females.

Males and females may vary in the risk decisions they make because of differences in general tendencies to approach risky behaviors, although this may be highly dependent on the situation. It follows that males and females may also differ on the degree of risk that they advise for others. Assuming that men and women are asked for advice about somewhat different decision situations (e.g., mechanics, pregnancy), they might have different experiences in giving advice.

In addition to potential sociobiological differences in proclivities toward risk, males and females might be differentially sensitive to specific values that apply in different decision situations. Consequently, men and women may differ on the amount of risk they would adopt in a decision situation as well as the amount of risk they would advise for another in a decision situation. Moreover, researchers have suggested that characteristics of the decision situation might condition the influence of gender on the advice given to others.

SITUATIONAL INFLUENCES ON RISK DECISIONS

It is clear that features of the decision situation will influence the decision that is made. Logically, the decision situation itself defines the alternatives to choose from, as well, as the information that is available. However, the decision maker also enters the decision situation with specific characteristics (e.g., mood, gender). Consequently, it is reasonable to expect that the nature of the situation may interact with characteristics of the decision maker to influence the decision reached. We expect that an understanding of risk decision making will become more complicated as mood and gender effects combine within a situation. Mood can have a variety of influences on a specific decision situation and individuals can react to such situations with different moods. In addition, gender effects may not be consistent across situations. As the sociobiological and risk-as-value hypotheses imply, there can be different underlying reasons that men and women make their decisions. This does not mean that the decisions will necessarily be different, merely that the reasoning behind the decisions may be different. Ultimately, it appears that the effects of mood and gender on risk decision making, and in turn the risk advice given to others, may be determined by the nature of the situation.

Another aspect of the situation that can affect risk-taking decisions is whether the situation is considered typically risky or typically cautious (Kogan & Wallach, 1964). In a typically risky situation, a sample of individuals will, on average, tend to choose a more risky response. In contrast, a sample of individuals in a typically cautious situation will tend to behave in a more cautious manner. For example, many games and sports are considered risky situations, while situations that involve health care are often considered cautious. Consequently, one way that decision situations can vary is in terms of their risky or cautious nature. We considered the extent that mood and gender influence the advice given to others by varying the cautious or risky nature of the decision situation. We believe that, although there may be consistent effects of mood and gender on advice given for risk decisions, the extent to which mood and gender influence risk advice will be dependent on the typically risky or cautious nature of the decision situation.

METHOD

PARTICIPANTS

The participants were 89 male and 158 female undergraduate students from North Dakota State University who participated for extra credit in their lower level psychology courses.

MATERIALS

The level of risk taking was assessed with two typically risky and two typically cautious decision situations from a revised version of the Choice Dilemmas Questionnaire (CDQ; Kogan & Wallach, 1964). Descriptions of the four scenarios included: 1) M is contemplating marriage to T, despite numerous recent arguments, and must decide whether or not to enter a marriage where happiness is not assured (cautious), 2) G is a chess player in a tournament who has the choice of a deceptive though risky maneuver that would leave G exposed and defeated if it failed (risky), 3) F is a college senior who has graduate school options of attending either University X, which has a world-wide reputation but where only a fraction of candidates receive a degree, or University Y, where all admitted are awarded a degree but has less of a reputation (risky), and 4) B, a newlywed, has a heart ailment that may prevent her from having a child. A delicate operation could relieve the heart condition, but it could be fatal (cautious).

For each scenario, participants were asked to give advice to the central character. The first question was whether or not the central character should proceed with the risky course of action. In the second question participants were asked to state the degree to which they would be supportive of the central character taking the possible action (expressed as a percentage) and not taking the possible action (expressed as a percentage; both percentages summing to 100%).

PROCEDURE

Throughout the study, participants were presented with uplifting, neutral, or morose background music to create greater variance in mood states (Eich, 1995). Mood was assessed before participants engaged in the task using the Positive Affect Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988). Ratings were made on a scale ranging from 1 (*very slightly*) to 5 (*extremely*) regarding how the participant felt right now for a set of 20 terms (e.g., active, guilty, interested, hostile). After the set of four CDQ items had been distributed to students, the instructions were read aloud. Upon completion of the questionnaire, students were debriefed and thanked for their participation.

RESULTS

There was substantial variance in the students' average mood according to their responses on the PANAS scales. Mean negative mood varied from 1.0 to 4.30 ($M = 1.37$, $SD = 0.46$) and mean positive mood varied from 1.0 to 4.40 ($M = 2.38$, $SD = 0.81$). The mean responses for the four scenarios as well as the relationships between mood and the advice given for the decision situations, are presented in Table 1. In accordance with our expectation of situational influence, the patterns of mood influence were not consistent across situations. Positive mood was correlated with more cautious advice in cautious scenario B, but had no significant impact on the other scenarios. Negative mood was correlated with more risky advice in the cautious scenario M, but was associated with more cautious advice in the risky scenario G. The influences of negative mood on the other two scenarios were not significant. However, the average of the responses to the two cautious situations was positively correlated with negative mood ($r = .16$, $p < .05$) and the average of the responses to the two risky situations was negatively correlated with negative mood ($r = -.14$, $p < .05$). Positive mood had no significant impact on the average responses to either cautious or risky situations.

TABLE 1
MEAN RESPONSES AND RELATIONSHIPS BETWEEN POSITIVE AND NEGATIVE MOOD AND RECOMMENDATIONS TO PURSUE THE RISKY COURSE OF ACTION FOR THE FOUR SCENARIOS

Decision scenario	<i>M</i>	<i>SD</i>	Mood	
			Positive	Negative
Cautious (M)	40.42	25.02	$r = .00$	$r = .15^*$
Cautious (B)	42.89	27.41	$r = -.13^*$	$r = .07$
Risky (G)	59.62	27.16	$r = -.02$	$r = -.14^*$
Risky (F)	61.17	25.16	$r = -.01$	$r = -.06$

Note: $*p < .05$.

Analysis of gender influences on the advice to take, or not take, the risky course of action is consistent with situational influences. The relationships between gender and the proportion of advisors favoring the risky course of action are presented in Table 2. Consistent with Byrnes et al. (1999), the cautious scenario B indicated men were more likely to engage in risky behaviors than women ($p < .03$), while the risky G scenario showed a similar, but marginal difference ($p < .09$). None of the other effects of gender for the other risky and cautious scenarios were significant.

TABLE 2
PERCENTAGE OF MEN AND WOMEN WHO RECOMMEND PURSUING THE RISKY COURSE OF ACTION FOR EACH OF THE FOUR SCENARIOS

Decision scenario	Male	Female	Fischer's Exact Test
Cautious (M)	34%	31%	$p > .67$
Cautious (B)	47%	32%	$p < .03$
Risky (G)	76%	65%	$p < .09$
Risky (F)	73%	74%	$p > .88$

DISCUSSION

In accordance with expectations, the influences of mood and gender on advice for decisions involving risk were dependent on characteristics of the situation. There were no uniform effects for positive mood or gender on either risky or cautious situations – although there were consistent effects for negative mood with more overall risk being taken in cautious situations and less in risky situations. This suggests that the extent to which mood and gender result in changes in risk advice for others is dependent on the situation.

How individuals react to the cautious or risky nature of the situation at hand may be more predictive of the outcome than are either mood or gender. For example, mood may influence a situation only to the extent that an individual interprets the mood. With different interpretations, the same mood can have different motivational effects (Clark & Isen, 1982). Lerner and Keltner (2000, 2001) argue that the influences of specific emotions on choices are specific to the type of choice being made. Similarly, a negative mood that is construed as fear may result in more risk-averse choices whereas a negative mood construed as anger may result in more risk-seeking choices (Lerner & Keltner, 2001). We might also see that men and women may react similarly to a situation. However, they may also react differently depending on the societal values and sociobiological motives that may be aroused in the situation (Wilson & Daly, 1985).

The relevance of the situation to the individual may also change how mood and gender influence risk advice for others. Participants in our study were asked to give advice to unknown persons. This contrasts with research in which participants make self-relevant decisions (Deldin & Levin; 1986; Isen & Patrick, 1983). Theories of mood and risk behavior are based on self-relevant decisions (i.e., mood repair, mood regulation; Martin & Clore, 2001), not decisions for others. This self versus other relevance may impact on the degree to which underlying mechanisms are involved in the type of risky advice given to others (Forgas, 1989). If the situation is not self-relevant, one is not personally affected by the consequences of choosing risk or caution for a given situation. The affect of self-relevance may also pertain to gender. It is possible that men are more

prone to take risks than women due to social expectations as well as evolutionary influences (Wilson & Daly, 1985). However, if the situation is not self-relevant, then the social benefits and costs of these values and motives may not be of importance. Ultimately, mood and gender may influence whether an individual gives risky or cautious advice to others but, as our results suggest, the amount of risk that the advisor proposes is dependent on the situation.

LIMITATIONS OF THIS STUDY

As a single investigation into the implications of mood and gender on risky advice for others, this study has several limitations. First, due to the correlational nature of our study, we cannot make causal claims about the relationship between mood and gender on risk advice for others. Moreover, because of the limited number of situations evaluated we cannot make an accurate assessment about the extent that the situation influences risky advice for others. The situations may also not be clearly perceived as risky or cautious decisions. What one person sees as a cautious behavior (i.e., choosing not to have surgery for fear of harm) may be seen as a risky behavior by another (i.e., choosing not to have surgery will prohibit me from having a child). Also, our variables were assessed through hypothetical situations and not real-life risk situations. Isen and Patrick (1983) argue that there is an important difference between real risk and hypothetical risk. Specifically, because the risk involved is not real, there is no real harm involved, and differential levels of risk taking can occur. Therefore, it is possible that the difference between real and hypothetical risk is a factor when giving risky advice to others.

IMPLICATIONS

Risk decisions are often made in the face of uncertainty and ambiguity (Hockey, Maule, Clough, & Bdzola, 2000). Consequently, people often seek advice to aid in decision making (Sneizek & Buckley, 1995). We suggest that individuals should be cautious when recruiting others to help with risky decisions. A general rule of thumb is to ask for advice from knowledgeable, unbiased, and trustworthy others. However, it appears that advisors are influenced by situational factors in a similar manner to risk takers. There is still much to learn about advice-giving and the factors that influence the advice individuals may give others. Future researchers should focus on the features of the situation and how individuals interpret these when giving advice.

REFERENCES

- Byrnes, J. P., Miller, D. C., & Schafer, W. D. (1999). Gender differences in risk taking...meta-analysis. *Psychological Bulletin*, *125*, 367-383.

- Cecil, E. A. (1972). Factors affecting individual risk taking attitudes. *Journal of Psychology*, **82**, 223-225.
- Clark, M. S., & Isen, A. M. (1982). Toward understanding the relationship between feeling states and social behavior. In A. Hastorf & A. M. Isen (Eds.), *Cognitive social psychology* (pp. 73-108). New York: Elsevier.
- Connolly, T., Arkes, H. R., & Hammond, K. R. (2000). *Judgment and decision making: An interdisciplinary reader*. New York: Cambridge University Press.
- Deldin, P. J., & Levin, I. P. (1986). The effect of mood induction in a risky decision task. *Bulletin of the Psychonomic Society*, **24**, 4-6.
- Eich, E. (1995). Searching for mood dependent memory. *Psychological Science*, **6**, 67-75.
- Forgas, J. P. (1989). Mood effects on decision making strategies. *Australian Journal of Psychology*, **41**, 197-214.
- Forgas, J. P. (1995). Mood and judgment: The affect infusion model (AIM). *Psychological Bulletin*, **23**, 1100-1110.
- Hockey, G. R. J., Maule, A. J., Clough, P. J., & Bdzola, L. (2000). Effects of negative mood states on risk in everyday decision making. *Cognition and Emotion*, **14**, 823-856.
- Isen, A. M. (1987). Positive affect, cognitive processes, and social behavior. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (pp. 203-253). San Diego: Academic Press, Inc.
- Isen, A. M. (1993). Positive affect and decision making. In M. Lewis & J. M. Haviland (Eds.), *Handbook of emotions* (pp. 261-277). New York: Guilford.
- Isen, A. M., & Patrick, R. (1983). The effects of positive feelings on risk taking: When the chips are down. *Organizational Behavior and Human Performance*, **31**, 194-202.
- Kogan, N., & Dorros, K. (1978). Sex differences in risk taking and its attribution. *Sex Roles*, **4**, 755-765.
- Kogan, N., & Wallach, M. A. (1964). *Risk-taking: A study in cognition and personality*. New York: Holt, Rinehart, & Winston.
- Lerner, J. S., & Keltner, D. (2000). Beyond valence: Toward a model of emotion-specific influences on judgment and choice. *Cognition and Emotion*, **14**, 473-493.
- Lerner, J. S., & Keltner, D. (2001). Fear, anger, and risk. *Journal of Personality and Social Psychology*, **81**, 146-159.
- Loewenstein, G., & Lerner, J. S. (2003). The role of affect in decision making. In R. J. Davidson, K. R. Scherer, & H. H. Goldsmith (Eds.), *Handbook of affective sciences* (pp. 619-642). London: Oxford University Press.
- Mano, H. (1992). Judgments under distress: Assessing the role of unpleasantness and arousal in judgment formation. *Organization Behavior and Human Decision Processes*, **52**, 216-246.
- Martin, L. L., & Clore, G. L. (Eds.) (2001). *Theories of mood and cognition: A user's guidebook*. Mahwah, NJ: Erlbaum.
- Mellers, B. A., & McGraw, A. P. (2001). Anticipated emotions as guides to choice. *Current Directions in Psychological Science*, **10**, 210-214.
- Plous, S. (1993). *The psychology of judgment and decision making*. New York: McGraw-Hill.
- Schwarz, N. (2000). Emotion, cognition, and decision making. *Cognition and Emotion*, **14**, 433-440.
- Schwarz, N., & Clore, G. L. (1996). Feelings and phenomenal experience. In E. T. Higgins & A. W. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 433-465). New York: Guilford.
- Sniezek, J. A., & Buckley, T. (1995). Cueing and cognitive conflict in judge-advisor decision making. *Organizational Behavior and Human Decision Processes*, **62**, 159-174.
- Sniezek, J. A., & Van Swol, L. M. (2001). Trust, confidence, and expertise in a judge-advisor system. *Organizational Behavior and Human Decision Processes*, **84**, 288-307.

- Wallach, M. A., & Kogan, N. (1959). Sex differences and judgment processes. *Journal of Personality*, *27*, 555-564.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, *54*, 1063-1070.
- Wilson, M., & Daly, M. (1985). Competitiveness, risk taking, and violence: The young male syndrome. *Ethology & Sociobiology*, *6*, 59-63.