THE EFFECT OF PERCEIVED SIMILARITY AND CATEGORIZATION ON CONSUMER SEQUENTIAL RISK-TAKING

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Web Appendix A

PILOT STUDY: USING DOMAIN AS A PROXY FOR SIMILARITY

In a pilot study, we confirm that there is a high degree of overlap between judgments of similarity and previously established risk domains. The results of this pilot study confirm the use of risk domain as a means to manipulate similarity. We demonstrate that risks from the same domain are generally seen as more similar to each other than to risks from different domains. In the previous work on domain-specific risk-taking, five distinct domains—financial, social, recreational, ethical, health/safety—were confirmed through factor analysis (Weber, Blais, and Betz 2002). In this pilot study, participants actively rate similarity between risks—a measurement that has not been mapped onto domain definitions before—thereby showing that judgments of similarity, not just behavior, vary by domain as well.

Method

Participants were 75 individuals recruited through mTurk (M_{Age} = 34.6 years, 45.3% female). Participants were shown twenty risky activities and were asked to rate similarity on a scale from zero ("Completely Different") to 100 ("Identical—No Difference") for all possible pairs of activities within the set. The risky activities we used were taken from the DOSPERT (Weber et al., 2002; Blais and Weber, 2006), with four risky activities from each of the risk domains. No information about risk domain was conveyed to the participants. The instructions and activities used for the pilot study are available in Web Appendix B and Table 2A.

Results and Discussion

For this study, we explicitly measure perceived similarity between risky activities to determine whether risks from the same domain are indeed seen as more similar to each other than to risks from different domains. To understand how perceived similarity relates to domain, we compared similarity ratings for each domain. These results are reported in Table 1A. For each domain, we report the average similarity ratings between the four risky activities from that domain (same domain); as well as the average similarity ratings between the four risks from the specified domain and the sixteen risks not from that domain (different domain). For example, consider the financial domain. The four activities we used for this domain were: (1) investing in the stock market, (2) betting on the outcome of a sporting event, (3) gambling at a casino, and (4) purchasing a lottery ticket. In the "Same Domain" column of Table 1A we report the average similarity rating for all possible comparisons between the four financial risks (e.g., between (1) and (2), (1) and (3), (1) and (4), (2) and (3), (2) and (4), (3) and (4)). For the "Different Domain" column we report the average similarity rating for all possible comparisons between the four financial risks and the sixteen non-financial risks.

Table 1A Average Perceived Similarity Rating by Domain (Same vs. Different), Pilot Study

Target Risk Domain	**Referent Risk**		**p-value**
	Same Domain	*Different Domain*	
Recreational	39.65	19.03	$p < .001$
Social	29.93	16.82	$p < .001$
Financial	52.10	19.41	$p < .001$
Ethical	37.49	15.45	$p < .001$
Health/Safety	43.42	21.63	$p < .001$

Notes: (1) A list of the specific activities by domain is available in Web Appendix B and Table 2A. (2) The p-value listed for each activity is for a t-test comparing the average perceived similarity values from the same domain versus the different domain columns. (3) The domains and risky activities used come from the DOSPERT (Weber, Blais, and Betz, 2002; Blais and Weber, 2006).

As Table 1A shows, the average similarity ratings are significantly higher for comparisons within the same domain than for comparisons across different domains. This pattern of results holds for all five risk domains, as well as for each risky activity (except one) (see Table 2A for similarity ratings by activity). Finally, if we do an overall comparison of similarity ratings between same domain risks and different domain risks, we find that, more generally, when activities are from the same domain they are seen as more similar to each other than to activities from different domains ($M_{Same} = 40.52$ vs. $M_{Different} = 18.60$, $t(142.98) = 8.70$, $p < .001$).

Table 2A Average Perceived Similarity Ratings by Activity, Pilot Study

Target Risk	Referent Risk		p-value
	Same Domain	*Different Domain*	
Riding on an airplane (R)	28.30	12.53	$p < .001$
Asking for a raise (S)	32.72	17.04	$p < .001$
Betting on a sporting event (F)	57.19	20.63	$p < .001$
Bungee-jumping (R)	42.69	23.53	$p < .001$
Buying an illegal drug (E)	29.62	18.70	$p < .01$
Choosing an enjoyable career over secure one (S)	30.01	18.15	$p < .001$
Gambling at a casino (F)	55.44	21.73	$p < .001$
Wearing provocative clothing (S)	18.20	14.52	*n.s.*
Buying a lottery ticket (F)	46.91	17.33	$p < .001$
Riding a motorcycle without a helmet (H)	50.60	25.40	$p < .001$
Not wearing a seatbelt (H)	48.80	22.01	$p < .001$
Not going to the doctor after persistent pain (H)	33.88	17.17	$p < .001$
Not returning a wallet (E)	40.18	11.92	$p < .001$
Passing off someone else's work as your own (E)	37.77	15.48	$p < .001$
Piloting a small plane (R)	43.03	19.91	$p < .001$
Scuba diving (R)	44.59	20.36	$p < .001$
Shoplifting a small item (E)	42.39	15.70	$p < .001$
Speaking your mind at work (S)	38.78	17.13	$p < .001$
Investing in the stock market (F)	48.88	17.99	$p < .001$
Walking home alone at night (H)	40.41	21.95	$p < .001$

Notes: (1) The domain for each activity is specified in parentheses after the activity, where R = recreational, S = social, F = financial, E = ethical, and H = health/safety. (2) The p-value listed for each activity is for a t-test comparing the average perceived similarity value reported in the same domain column versus the average perceived similarity value reported in the different domain column. (3) The domains and activities come from the DOSPERT (Weber, Blais, and Betz, 2002; 2006).

Overall, the results from this pilot study confirm that individuals see varying degrees of similarity between risks and that this similarity largely coincides with established risk domains. These results imply that we can use risk domain as a way to manipulate similarity. Accordingly,

subsequent risks will be seen as more similar to a prior risk if they are from the same domain as the prior risk than if they are from a different domain.

STUDY 1: THE ROLE OF SIMILARITY IN SEQUENTIAL RISK-TAKING INTENTIONS

In this study, we recruited 750 participants, but forty-nine were dropped because they failed an Instructional Manipulation Check (Oppenheimer, Meyvis, and Davidenko 2009) or because they failed to write anything in the manipulation. The subsequent risks used in this study were (domain is specified in parentheses): betting a day's income on the outcome of a sporting event (financial), going bungee-jumping off of a tall bridge (recreational), expressing opinions that are different from your friends' (social), passing off someone else's work as your own (ethical), and riding in the front seat of a car without a seatbelt (health/safety).

Table 3A Regression Results for Risk Perception, Study 1

DV: Risk Perception	(1)
Match	.08
	(.06)
Constant	3.57***
	(.10)
Random Effects	Individual
Fixed Effects	Prior Risk Domain Subsequent Risk Domain
N	3,505 (701 groups)
R^2	.31

* $p < .05$, ** $p < .01$, *** $p < .001$

Notes: (1) This is a random effects regression of risk perception on individual-level random effects, prior risk domain fixed effects, subsequent risk domain fixed effects, and a dummy-coded indicator variable for Match, where 1 = domain of the subsequent risk matches the domain of the prior risk, 0 = domain of the subsequent risk does not match the domain of the prior risk. (2) Standard errors are reported in parentheses below each coefficient.

Table 4A Regression Results for Similarity, Study 1

DV: Similarity	(1)
Match	31.96***
	(1.00)
Constant	8.75***
	(1.61)
Random Effects	Individual
Fixed Effects	Prior Risk Domain Subsequent Risk Domain
N	3,505 (701 groups)
R^2	.22

* $p < .05$, ** $p < .01$, *** $p < .001$

Notes: (1) This is a random effects regression of similarity on individual-level random effects, prior risk domain fixed effects, subsequent risk domain fixed effects, and a dummy-coded indicator variable for Match, where 1 = domain of the subsequent risk matches the domain of the prior risk, 0 = domain of the subsequent risk does not match the domain of the prior risk. (2) Standard errors are reported in parentheses below each coefficient.

Table 5A Regression Results for Risk-Taking Preferences, Study 1

DV: Risk-Taking Likelihood	(1)	(2)
Match	.21**	
	(.07)	
Similarity		.01***
		(.001)
Perceived Risk	-.58***	-.59***
	(.02)	(.02)
Constant	5.82***	5.79***
	(.12)	(.12)
Random Effects	Individual	
Fixed Effects	Prior Risk Domain Subsequent Risk Domain	
N	3,505 (701 groups)	
R^2	.35	.35

* $p < .05$, ** $p < .01$, *** $p < .001$

Notes: (1) Both Regressions 1 and 2 are random effects regressions of risk-taking likelihood that include individual-level random effects, prior risk domain fixed effects, and subsequent risk domain fixed effects. (2) Match is a dummy-coded indicator variable, where 1 = domain of the subsequent risk matches the domain of the prior risk, 0 = domain of the subsequent risk does not match the domain of the prior risk. Similarity is a continuous scale measure from 0 to 100 where higher values indicate greater similarity between the risk being considered and the prior risk. (3) Standard errors are reported in parentheses below each coefficient.

STUDY 2: CHANGING SIMILARITY CHANGES RISK-TAKING PREFERENCES

We recruited 200 participants, but only 172 finished the entire survey. Of those, 22 were dropped for failing an Instructional Manipulation Check. The subsequent risks used in this study were (domain is specified in parentheses): bungee-jumping over a canyon (recreational), engaging in unprotected sex (health/safety), and betting a day's worth of income at the horse races (financial).

Table 6A Regression Results for Similarity, Study 2

DV: Similarity	(1)
Frame-Match	3.63
	(3.31)
Constant	35.51***
	(3.83)
Random Effects	Individual
Fixed Effects	Prior Risk Condition Subsequent Risk Domain
N	300 (150 groups)
R^2	.05

* $p < .05$, ** $p < .01$, *** $p < .001$

Notes: (1) This is a random effects regression of similarity on individual-level random effects, prior risk condition (Riding a Motorcycle vs. Dangerous Job) fixed effects, subsequent risk domain fixed effects, and a dummy-coded indicator variable for Frame-Match, where 1 = the domain of the subsequent risk matched the domain framing for the prior risk, 0 = the domain of the subsequent risk did not match the domain framing for the prior risk. For example, in the Riding a Motorcycle, Health-Safety Frame condition, the frame-match risk is the subsequent health-safety risk and the frame no-match risk is the recreational risk. (2) Standard errors are reported in parentheses below each coefficient.

Table 7A Regression Results for Risk Perception, Study 2

DV: Risk Perception	(1)
Frame-Match	-.11
	(.15)
Constant	5.72***
	(.20)
Fixed Effects	Individual Subsequent Risk Domain
N	300 (150 groups)
R^2	.16

* $p < .05$, ** $p < .01$, *** $p < .001$

Notes: (1) This is a fixed effects regression of risk perception on individual-level fixed effects, subsequent risk domain fixed effects, and a dummy-coded indicator variable for Frame-Match where 1 = the domain of the subsequent risk matched the domain framing for the prior risk, 0 = the domain of the subsequent risk did not match the domain framing for the prior risk. For example, in the Riding a Motorcycle, Health-Safety Frame condition, the frame-match risk is the subsequent health-safety risk and the frame no-match risk is the recreational risk. (2) Standard errors are reported in parentheses below each coefficient.

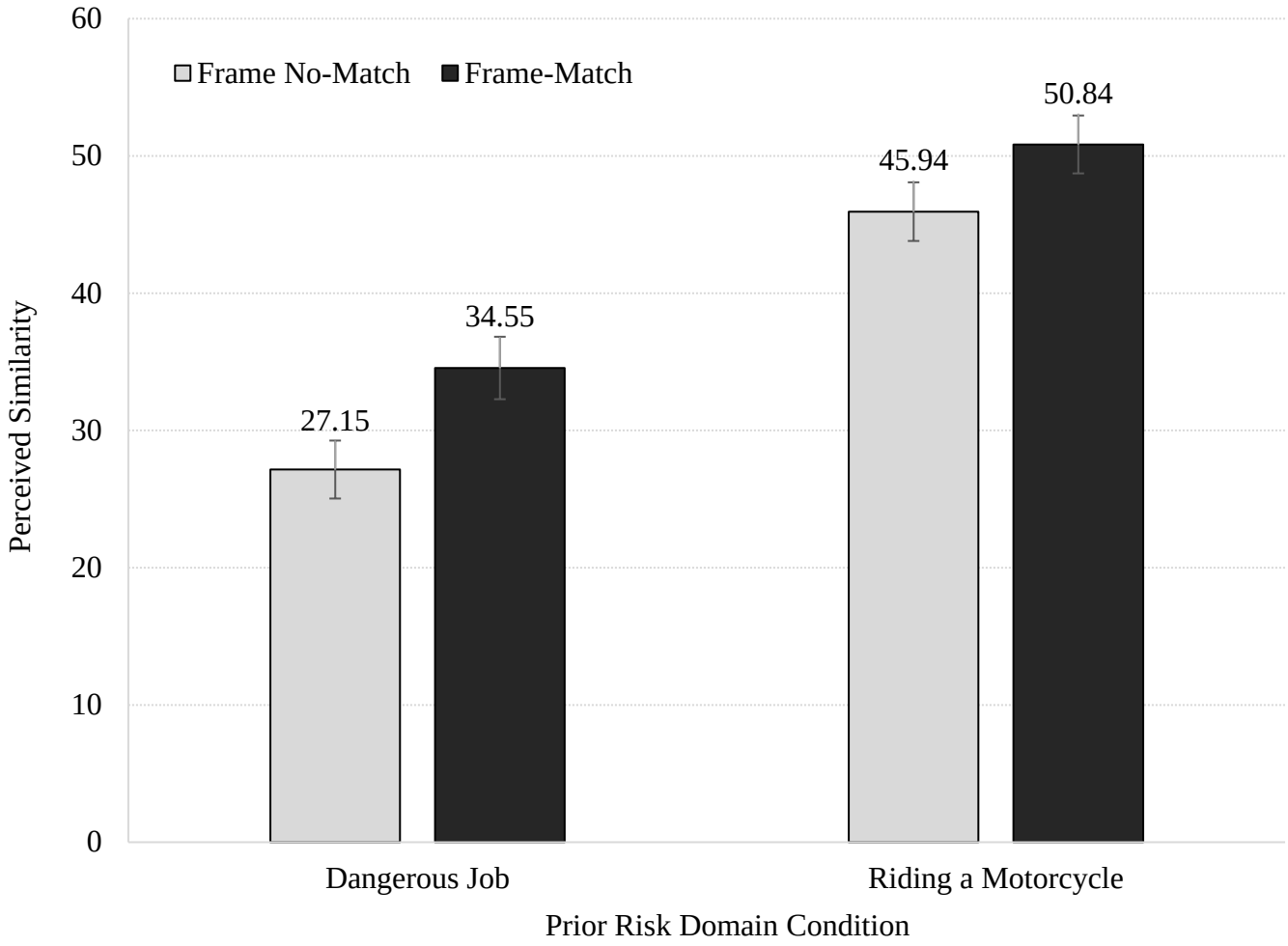
Table 8A Regression Results for Risk Preferences, Study 2

DV: Risk-Taking Likelihood	(1)	(2)
Frame-Match	.36*	
	(.17)	
Similarity		.01+
		(.003)
Perceived Risk	-.72***	-.78***
	(.07)	(.07)
Constant	6.25***	6.48***
	(.44)	(.43)
Random Effects	Individual	
Fixed Effects	Prior Risk Condition Subsequent Risk Domain	
N	300 (150 groups)	
R^2	.32	.31

*+ p < .10, * p < .05, ** p < .01, *** p < .001*

Notes: (1) Both Regressions 1 and 2 are random effects regressions including individual-level random effects, prior risk condition fixed effects, and subsequent risk domain fixed effects. (2) Frame-Match is a dummy-coded indicator where 1 = the domain of the subsequent risk matched the domain framing for the prior risk, 0 = the domain of the subsequent risk did not match the domain framing for the prior risk. For example, in the Riding a Motorcycle, Health-Safety Frame condition, the frame-match risk is the subsequent health-safety risk and the frame no-match risk is the recreational risk. (2) Similarity is a continuous measure from 0 to 100, where higher values indicate greater perceived similarity between the risk and the prior risk. (3) Standard errors are reported in parentheses below each coefficient.

Figure 2A Perceived Similarity Post-Test, Study 2



Notes: (1) Values are raw similarity values (not fitted values). (2) Frame-Match indicates that the domain of the subsequent risk matched the domain framing manipulation for the prior risk, while Frame No-Match indicates the domain of the subsequent risk did not match the framing manipulation for the prior risk (e.g., for a participant in the Riding a Motorcycle condition who was assigned to the Recreational framing, the Frame-Match risk would be the subsequent recreational risk, while the Frame No-Match risk would be the subsequent health/safety risk). (3) Perceived similarity is measured on a scale from 0 to 100, where higher values indicate greater similarity between a prior risk and a given subsequent risk. (4) Planned contrasts show that perceived similarity is significantly higher for matching subsequent risks in the Dangerous Job condition ($p = .009$) and marginally significantly higher for subsequent risks in the Riding a Motorcycle condition ($p = .051$). (5) Error bars are for standard errors from a two-sample t-test comparing Frame-Match vs. Frame No-Match for each prior risk domain condition.

Table 9A Regression Results for Similarity, Study 2 Post-Test

DV: Similarity	(1)
Frame-Match	6.18**
	(1.93)
Constant	23.02***
	(3.53)
Fixed Effects	Individual Prior Risk Condition Subsequent Risk Domain
N	786 (393 groups)
R^2	.09

* $p < .05$, ** $p < .01$, *** $p < .001$

Notes: (1) The regression is a random effects regression of similarity on individual-level random effects, prior risk condition fixed effects, subsequent risk domain fixed effects, and a dummy-coded indicator for Frame-Match (1 = the domain of the subsequent risk matched the domain framing for the prior risk, 0 = the domain of the subsequent risk did not match the domain framing for the prior risk). (2) Similarity is a continuous measure from 0 to 100, where higher values indicate greater perceived similarity between the risk and the prior risk. (3) Standard errors are reported in parentheses below each coefficient.

EXPLORATORY PROCESS STUDY

In a separate exploratory study, we empirically tested our proposed process using measures of familiarity and experience (self-efficacy), and self-perception. We also measured other potential alternative process variables to rule these out. The measures tested in this study are the same as those used in Studies 3A, 3B, and 4, and provide the opportunity to test the mediation model in an environment when other variables are not being manipulated at the same time. The overall design uses the same matching domain manipulation approach as employed in several of our other studies.

Method

We recruited 300 participants through mTurk, but four were dropped for failing to complete the survey in its entirety, leaving 296 participants (M_{Age} = 35.8 years, 43.6% female). Participants completed the same matching manipulation as they did in Study 1 (write about a time you took a risk in {randomly assigned domain}) and then were asked to rate their likelihood of taking each of five subsequent risks (one from each domain). The subsequent risks we used were (domain is specified in parentheses): betting a day's income on the outcome of a sporting event (financial), riding in the front seat of a car without a seatbelt (health/safety), bungee-jumping off of a tall bridge over a river (recreational), taking credit for work that is not your own (ethical), and expressing contradictory opinions to a group of your friends (social).

As before, we measured risk perception for each of the subsequent risks. In addition to measuring perceived risk and similarity with the prior risk, we also took several additional measures for each subsequent risk. Three of these were related to our hypothesized process: for self-efficacy we measured familiarity ("Does this risk feel new and novel or old and familiar?" measured via a 7-point scale from 1 ("Novel") to 7 ("Old")) and experience ("How much experience do you have related to this activity?" measured via a 7-point scale from 1 ("Very Little Experience") to 7 ("A

Lot of Experience")); for self-signaling we asked a question about self-perception ("I'm the type of person who likes taking risks of this type" measured via a 7-point agreement scale from 1 ("Strongly Disagree") to 7 ("Strongly Agree")).

We also measured several other variables that could be affected by the matching manipulation: (1) knowledge ("To what extent are the risks of this activity known precisely by the people who participate in the activity?"); (2) perceived control over negative outcomes ("If you participate in this risk, to what extent can you, by personal skill or diligence, avoid negative outcomes?"); (3) dread ("Is this a risk that you have learned to live with and can think about reasonably calmly, or is it one you have great dread for—on the level of a gut reaction?"); (4) severity of the consequences ("When the risk from this activity is realized in the form of a mishap or injury, how likely is it that the consequence will be fatal?"); (5) predicted probability of a negative outcome ("What is the probability that participating in this activity will result in a negative outcome?"); (6) predicted probability of a positive outcome ("What is the probability that participating in this activity will result in a positive outcome?"). Several of these measures were adapted from previous research on risk perception and risk-taking behavior (Slovic, Fischoff, and Lichtenstein 1985; Weber and Hsee 1998).

Results and Discussion

Manipulation check. A fixed effects regression of similarity on the dummy-coded indicator for match, and fixed effects for participant and subsequent risk domain, shows a highly significant and positive effect of matching domain on similarity ($\beta_{Match} = 32.95$, SE = 1.54, t = 21.34, $p < .001$). This confirms our manipulation of similarity via risk domain match between the subsequent risk and prior risk.

Risk perception. A fixed effects regression of risk perception on an indicator for match (1 = domain of the subsequent risk matches the domain of the prior risk, 0 = domain of the subsequent

risk does not match the domain of the prior risk), and fixed effects for participant and subsequent risk domain shows a marginally significant positive effect of match on risk perception (β_{Match} = .18, SE = .09, t = 1.94, p = .053). We control for risk perception in all of the following analyses, unless otherwise noted.

Risk preferences. To examine risk-taking preferences, we ran a random effects regression of risk-taking likelihood on the dummy-coded match indicator, random effects for participant, and fixed effects for prior and subsequent risk domain. Replicating our findings from Study 1, we find a significant positive effect of matching on risk-taking likelihood (β_{Match} = .22, SE = .10, z = 2.26, p = .024; fitted values: Match = 3.57 vs. No-Match = 3.35). This implies positive state dependence in sequential risk-taking, dependent on the prior risk.

Process. First, we tested which, if any, of the process variables were significantly affected by the similarity manipulation. The only variables we had *a priori* predictions for were: self-efficacy[1] (experience and familiarity) and self-perception. To do this, we ran a fixed effects regression of each process variable on fixed effects for individual and subsequent risk domain, and an indicator variable for match (1 = the domain of the subsequent risk matched the domain of the prior risk, 0 = the domain of the subsequent risk did not match the domain of the prior risk). If the process variable is affected by similarity between the prior and subsequent risks, then the coefficient on the match variable should be significant. We report the coefficient for the match variable for each regression in Table 10A below.

As Table 10A shows, the only process variables significantly affected by similarity between the subsequent and prior risk were: self-efficacy (β_{Match} = .17, SE = .08, t = 2.09, p = .037; fitted

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[1] Familiarity and experience were highly positively correlated (r = .50, p < .001), so we combined these two measures into a single self-efficacy index for the analyses that follow.

values: Match = 3.86 vs. No-Match = 3.69), and self-perception (β_{Match} = .27, SE = .09, t = 3.08, p = .002; fitted values: Match = 3.00 vs. No-Match = 2.73). This suggests that the effect of similarity is driven by changes in feelings of self-efficacy and by self-signaling of risk preference through the prior risk. It also implies that other possible mechanisms—changing outcome expectancies (positive or negative), feelings of control over the outcomes, knowledge about the risk, feelings of dread and severity for the outcomes—are not driving the effect. This is not to say that these feelings are not changing or affected by the prior risk-taking experience, but rather these changes are not separate from changes in perceived risk, which we already control for. In many of the regressions in Table 10A, risk perception is a significant predictor of the variable being examined. However, with self-efficacy and self-signaling, while risk perception is a significant predictor, matching domain has a significant and positive effect that is independent of what is already accounted for by subjective risk beliefs.

To further test self-efficacy and self-signaling, we tested for mediation of the matching effect jointly by both of these mechanisms. To test for this, we ran a Hayes (2013) bootstrapped (50,000 iterations) multiple mediation model (Model 6) testing for joint mediation of the effect of similarity by both self-efficacy and self-perception. This model also included risk perception as a covariate, and fixed effects for participant, and prior and subsequent risk domain. We found significant indirect-only mediation by self-perception (a x b = .13, SE = .05, p = .01, 95% bias-corrected confidence interval: [.04, .23]). From the model, matching domain between the subsequent risk and the prior risk increases self-perception by 0.27 units (on a 7-point scale) compared to non-matching domain risks ($p < .01$). A one-unit increase in self-perception in turn increases risk-taking likelihood by 0.48 units (on a 7-point scale) ($p < .001$). We also found marginally significant mediation by self-efficacy (a x b = .04, SE = .02, p = .06, 95% bias-corrected confidence interval: [.002, .08]). From the model, matching domain increases feelings of self-

efficacy by 0.21 units compared to non-matching domain risks ($p = .04$). A one-unit increase in self-efficacy in turn increases risk-taking likelihood by 0.18 units ($p < .001$). The direct effect of matching domain on risk-taking likelihood is not significant when including the joint mediators (c' = .09, SE = .09, $p = .35$).

Taken together, the multiple mediation model suggests that both self-efficacy and self-perception are possible joint mediators of the positive state dependence we demonstrate. We further test this mechanism in Studies 3A and 3B by directly manipulating feelings of self-efficacy and the self-signal sent by the prior risk-taking experience, and investigating whether they separately moderate the effect of similarity.

Table 10A Regression Results for Mechanism Variables, Exploratory Process Study

	(1) *Knowledge*	(2) *Control*	(3) *Self-Efficacy*	(4) *Dread*	(5) *Severity*	(6) *Self-Perception*	(7) *Pr(Negative)*	(8) *Pr(Positive)*
Match	-.11	.10	.17*	.05	.01	.27**	-.01	.02
	(.10)	(.11)	(.08)	(.10)	(.08)	(.09)	(.01)	(.02)
Risk Perception	.04	-.14***	-.22***	-.26***	.13***	-.37***	.05***	-.05***
	(.03)	(.03)	(.03)	(.03)	(.03)	(.03)	(.03)	(.005)
Constant	3.19***	4.67***	4.24***	2.21***	1.28***	3.61***	0.34***	0.58***
	(.17)	(.19)	(.13)	(.17)	(.14)	(.15)	(.02)	(.03)
Fixed Effects	Individual Subsequent Risk Domain							
N	1,480 (296 groups)							
R^2	.03	.16	.40	.26	.62	.33	.29	.16

* $p < .05$, ** $p < .01$, *** $p < .001$

Notes: (1) Each regression is a fixed effects regression where the DV is the variable specified at the top of each column (e.g., for Regression 1 the DV is Knowledge). (2) Match is a dummy-coded indicator variable, where 1 = the domain of the subsequent risk matched the domain of the prior risk, 0 = the domain of the subsequent risk did not match the domain of the prior risk. (3) Standard errors are reported in parentheses below each coefficient.

STUDY 3A: SELF-EFFICACY MODERATES THE EFFECT OF SIMILARITY

We recruited 1,000 participants. Seventeen participants were dropped for failing an Instructional Manipulation Check, leaving 983 participants. The subsequent risks were as follows (domain is specified in parentheses): buying a lottery ticket (financial), riding in a car without a seatbelt (health/safety), scuba diving in the ocean (recreational), taking credit for work that is not your own (ethical), and admitting your tastes are different from a friend's (social).

Table 11A Regression Results for Manipulation Check Variables, Study 3A

	(1) *Experience*	(2) *Familiarity*	(3) *Self-Efficacy*	(4) *Self-Perception*
Experience Condition	.38***	.39***	.39***	.24*
	(.10)	(.10)	(.09)	(.10)
Constant	4.02***	4.77***	4.39***	2.84***
	(.12)	(.12)	(.11)	(.13)
Fixed Effects	Prior Risk Domain			
N	983			
R^2	.08	.07	.07	.05

* $p < .05$, ** $p < .01$, *** $p < .001$

Notes: (1) All of the regressions are fixed effects regressions with prior domain fixed effects. Since these are manipulation check variables, each participant only provided one response for each. (2) The DV of the regression is listed at the top of the column (e.g., the DV for Regression 1 is Experience). (2) Experience Condition is a dummy-coded indicator variable for the Experience condition (1 = High Experience, 0 = Low Experience). (3) We measured self-perception to show that this variable is similarly affected by the manipulation. (4) Standard errors are listed in parentheses below each coefficient.

Table 12A Regression Results for Similarity, Study 3A

DV: Similarity	(1)	(2)	(3)
Match	45.08***	43.94***	45.07***
	(1.05)	(1.42)	(1.05)
Experience Condition		0.62	1.12
		(1.09)	(1.00)
Match x Experience Condition		2.51	
		(2.10)	
Constant	29.49***	29.15***	28.94***
	(1.43)	(1.52)	(1.51)
Random Effects		Individual	
Fixed Effects		Prior Risk Domain Subsequent Risk Domain	
N		4,915 (983 groups)	
R^2	.30	.30	.30

* $p < .05$, ** $p < .01$, *** $p < .001$

Notes: (1) For these results we ran a random effects regression of similarity including random effects for individual and fixed effects for prior and subsequent risk domain. (2) In Regressions 1 and 3, Match is a dummy-coded indicator where 1 = domain of the subsequent risk matched the domain of the prior risk, 0 = domain of the subsequent risk did not match the domain of the prior risk. In Regression 2, this variable is contrast-coded (-1 = No-Match, 1 = Match). (3) Experience Condition is an indicator variable for Experience condition. In Regression 2, this variable is contrast-coded (-1 = Low Experience condition, 1 = High Experience condition) In Regression 3, this variable is dummy-coded (0 = Low Experience condition, 1 = High Experience condition). (4) Standard errors are listed in parentheses below each coefficient.

Table 13A Regression Results for Risk Perception, Study 3A

DV: Risk Perception	(1)	(2)	(3)
Match	.06		.04
	(.05)		(.03)
Experience Condition		-.02	.03
		(.05)	(.03)
Match x Experience Condition			.08**
			(.03)
Constant	4.75***	4.78***	4.78***
	(.07)	(.08)	(.08)
Random Effects	Individual		
Fixed Effects	Prior Risk Domain Subsequent Risk Domain		
N	4,915 (983 groups)		
R^2	.44	.43	.44

* $p < .05$, ** $p < .01$, *** $p < .001$

Notes: (1) The regressions are random effects regressions of risk perception including random effects for participant, fixed effects for prior and subsequent risk domain. (2) In Regression 1, Match is a dummy-coded indicator, where 1 = the domain of the subsequent risk matched the domain of the prior risk, 0 = the domain of the subsequent risk did not match the domain of the prior risk. In Regression 3, this variable is contrast-coded (-1 = No-Match, 1 = Match). (3) Experience Condition is an indicator variable for the Experience condition. In Regression 2, this variable is dummy-coded (0 = Low Experience condition, 1 = High Experience condition). In Regression 3, this variable is contrast-coded (-1 = Low Experience condition, 1 = High Experience condition). (4) Standard errors are listed in parentheses below each coefficient.

Table 14A Regression Results for Risk-Taking Likelihood, Study 3A

DV: Risk-Taking Likelihood	(1)	(2)	(3)
Match	.28***	.15***	.09
	(.05)	(.03)	(.07)
Experience Condition		.06+	-.08
		(.03)	(.06)
Match x Experience Condition		.10***	.40***
		(.03)	(.11)
Perceived Risk	-.47***	-.44***	-.44***
	(.02)	(.01)	(.01)
Constant	4.24***	4.14***	4.03***
	(.09)	(.11)	(.11)
Random Effects		Individual	
Fixed Effects	Individual Subsequent Risk Domain	Prior Risk Domain Subsequent Risk Domain	
N		4,915 (983 groups)	
R^2	.49	.49	.49

*+ p < .10, * p* < .05, ** *p* < .01, *** *p* < .001

Notes: (1) Regression 1 is a fixed effects regression of risk-taking likelihood with fixed effects for participant and subsequent risk domain. Regressions 2 and 3 are random effects regressions of risk-taking likelihood with random effects for participant, and fixed effects for prior and subsequent risk domain. (2) Match is an indicator variable for whether the domain of the subsequent risk matched the domain of the prior risk. In Regressions 1 and 2, this variable is dummy-coded (1 = match, 0 = no match). In Regression 3, this variable is contrast-coded (-1 = no match, 1 = match). (3) Experience Condition is an indicator variable for Experience condition. In Regression 2, this variable is dummy-coded (0 = Low Experience condition, 1 = High Experience condition). In Regression 3, this variable is contrast-coded (-1 = Low Experience condition, 1 = High Experience condition). (4) Standard errors are listed in parentheses below each coefficient.

Interaction. There is no significant simple effect for matching in the Low Experience condition. This implies that participants were not significantly more likely to take matching risks relative to non-matching risks in this condition. While this could suggest that the effect of similarity did not replicate for this condition, we caution against comparing the Low Experience condition to the results in Study 1, since Study 1 participants wrote in detail about a prior risk (average word count = 81.74 words, SD = 44.19) while in this study participants were only asked to list a single

prior risk (average word count = 7.5 words, SD = 7.96). The Study 3A, Low Experience condition is thus better interpreted as lowering feelings of familiarity relative to our normal manipulation (as used in Study 1). We also find a marginally significant positive main effect of feelings of experience/familiarity. This suggests that greater feelings of self-efficacy increase risk-taking in general (not just for similar risks), confirming results from prior research on this variable.

Process. A process of self-efficacy is further confirmed if we look at the measures of familiarity and experience for the subsequent risks. These two measurements are highly correlated (r = 0.70, $p < .001$), so we combined them into a self-efficacy index. A random effects regression shows there is a significant interaction effect on this measure ($\beta_{\text{Match x High}} = .08$, SE = .02, z = 3.16, $p = .002$). Thus, self-efficacy is higher for more similar subsequent risks when individuals have more experience with a given risk type. There is also a significant simple effect of match ($\beta_{\text{Match}} = .12$, SE = .03, z = 4.80, $p < .001$), suggesting that similarity is a necessary part of the story: increasing feelings of experience/familiarity for one risk type leads to increased feelings of self-efficacy only for other risks that are of the same type, and not for risks that are of a different type.

To test for mediation, we ran a bootstrapped (50,000 iterations) moderated mediation model (Model 8) with risk-taking likelihood as the DV, the match indicator as the IV (dummy-coded), the measured self-efficacy index as the mediator, the High Experience condition as the moderator (dummy-coded), and with risk perception, participant fixed effects, subsequent risk domain, and prior risk domain as covariates (Hayes 2013). This analysis shows complementary mediation for the High Experience condition: the indirect effect of the self-efficacy index is positive and significant (a x b = .15, SE = .04, z = 3.74, $p < .001$, bias-corrected CI: [.07, .23]) and the direct effect is positive and significant (c' = .38, SE = .08, t = 4.71, $p < .001$). However, for the Low Experience condition there is no-effect non-mediation (a x b = .05, SE = .04, z = 1.43, $p = .15$, bias-corrected CI: [-.02, .12]; $c' = .05$, SE = .07, $t = 0.65$, $p = .52$). This analysis implies that more risk-taking in one domain

increases feelings of self-efficacy for risks that are from the same domain (similar risks), which then increases risk-taking likelihood for those risks.

Table 15A Regression Results for Measured Self-Efficacy, Study 3A

DV: Measured Self-Efficacy	(1)	(2)
Match	.12***	.08
	(.02)	(.07)
Experience Condition	.02	-.12*
	(.03)	(.06)
Match x Experience Condition	.08**	.31**
	(.02)	(.10)
Perceived Risk	-.26***	-.26***
	(.01)	(.01)
Constant	3.29***	3.23***
	(.10)	(.10)
Random Effects	Individual	
Fixed Effects	Prior Risk Domain Subsequent Risk Domain	
N	4,915 (983 groups)	
R^2	.50	.50

+ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Notes: (1) The regressions are random effects regressions of measured self-efficacy including random effects for participant, and fixed effects for prior and subsequent risk domain. (2) Match is an indicator variable for whether the domain of the subsequent risk matched the domain of the prior risk. In Regression 1, this variable is contrast-coded (-1 = did not match, 1 = match). In Regression 2, this variable is dummy-coded (0 = did not match, 1 = match). (3) Experience Condition is an indicator variable for the Experience condition. In Regression 1, this variable is contrast-coded (-1 = Low Experience condition, 1 = High Experience condition). In Regression 2, this variable is dummy-coded (0 = Low Experience condition, 1 = High Experience condition). (4) Standard errors are listed in parentheses below each coefficient.

STUDY 3B: SELF-SIGNALING MODERATES THE EFFECT OF SIMILARITY

We recruited 1,000 participants, however, 68 participants were never given the manipulation task because of an error with the survey website. These participants were excluded from the analyses for this study. A further ten participants were dropped after failing an Instructional Manipulation Check, leaving 922 participants. The five risks used for the subsequent risks in this study were (domain is specified in parentheses): investing 5% of your annual income in a speculative stock (financial), riding a bicycle without a helmet (health/safety), whitewater rafting at high water in spring (recreational), shoplifting a small item (e.g., pen, lipstick) from a drugstore (ethical), defending an unpopular issue at work (social).

Table 16A Regression Results for Self-Signaling Index, Study 3B

DV: Self-Signaling Index	(1)
Self-Signal Condition	.32**
	(.10)
Constant	2.35***
	(0.12)
Fixed Effects	Prior Risk Domain
N	922
R^2	.19

* $p < .05$, ** $p < .01$, *** $p < .001$

Notes: (1) This is a fixed effects regression of the Self-Signaling Index on fixed effects for prior risk domain and a dummy-coded indicator for the Self-Signaling condition (1 = Self-Signal: Positive condition, 0 = Self-Signal: Negative condition). (2) A t-test finds the same result (Self-Signal: Positive = 3.32 vs. Self-Signal: Negative = 2.98, t(912.53) = -3.08, p = .002). (3) Standard errors are listed in parentheses below each coefficient.

Table 17A Regression Results for Similarity, Study 3B

DV: Similarity	(1)	(2)
Match	29.54***	29.54***
	(.97)	(.97)
Self-Signal Condition		-.62
		(1.25)
Constant	15.95***	16.23***
	(1.67)	(1.76)
Random Effects	Individual	
Fixed Effects	Prior Risk Domain Subsequent Risk Domain	
N	4,610 (922 groups)	
R^2	.15	.15

* $p < .05$, ** $p < .01$, *** $p < .001$

Notes: (1) These regressions are random effects regressions of similarity including random effects for participant, and fixed effects for prior and subsequent risk domain. (2) Match is a dummy-coded indicator variable, where 1 = the domain of the subsequent risk matched the domain of the prior risk, 0 = the domain of the subsequent risk did not match the domain of the prior risk. (3) Self-Signal Condition is a dummy-coded indicator variable for the Self-Signaling condition assignment (1 = Self-Signal: Positive condition, 0 = Self-Signal: Negative condition). (4) Standard errors are listed in parentheses below each coefficient.

Table 18A Regression Results for Perceived Risk, Study 3B

DV: Risk Perception	(1)	(2)	(3)
Match	.09+	.09+	.05+
	(.05)	(.05)	(.03)
Self-Signal Condition		.10+	.06+
		(.06)	(.03)
Match x Self-Signal Condition			.02
			(.03)
Constant	5.40***	5.36***	5.45***
	(.08)	(.09)	(.08)
Random Effects	Individual		
Fixed Effects	Prior Risk Domain Subsequent Risk Domain		
N	4,610 (922 groups)		
R^2	.27	.27	.27

*+ p < .10, * p < .05, ** p < .01, *** p < .001*

Notes: (1) The regressions are random effects regressions of risk perception including random effects for participant, and fixed effects for prior and subsequent risk domain. (2) Match is an indicator variable for whether the domain of the subsequent risk matched the domain of the prior risk. In Regressions 1 and 2, this variable is dummy-coded (0 = did not match, 1 = match). In Regression 3, this variable is contrast-coded (-1 = did not match, 1 = match). (3) Self-Signal condition is an indicator variable for the Self-Signal condition. In Regression 1 and 2, this variable is dummy-coded (0 = Self-Signal: Negative condition, 1 = Self-Signal: Positive condition). In Regression 3, this variable is contrast-coded (-1 = Self-Signal: Negative condition, 1 = Self-Signal: Positive condition). (4) Standard errors are listed in parentheses below each coefficient.

Table 19A Regression Results for Risk-Taking Likelihood, Study 3B

DV: Risk-Taking Likelihood	(1)	(2)	(3)	(4)
Match	.10+		.05+	-.02
	(.05)		(.02)	(.07)
Similarity		.003***		
		(.001)		
Self-Signal Condition			.11***	.11+
			(.03)	(.06)
Match x Self-Signal Condition			.06*	.22*
			(.02)	(.10)
Risk Perception	-.51***	-.52***	-.51***	-.51***
	(.01)	(.01)	(.01)	(.01)
Constant	4.08***	4.06***	4.14***	4.04***
	(.11)	(.11)	(.11)	(.11)
Fixed Effects	Individual Prior Risk Domain Subsequent Risk Domain			
N	4,610 (922 groups)			
R^2	.52	.52	.52	.52

*+ p < .10, * p < .05, ** p < .01, *** p < .001*

Notes: (1) These are random effects regressions of risk-taking likelihood including random effects for participant and fixed effects for prior and subsequent risk domain. (2) Match is an indicator variable for whether the domain of the subsequent risk matched the domain of the prior risk. In Regressions 1 and 4, this variable is dummy-coded (0 = did not match, 1 = match). In Regression 3, this variable is contrast-coded (-1 = did not match, 1 = match). (3) Self-Signal Condition is an indicator variable for condition assignment. In Regressions 1 and 4, this variable is dummy-coded (0 = Self-Signal: Negative condition, 1 = Self-Signal: Positive condition). In Regression 3, this variable is contrast-coded (-1 = Self-Signal: Negative condition, 1 = Self-Signal: Positive condition). (4) Standard errors are listed in parentheses below each coefficient.

In the regression above, we find a significant main effect of Self-Signaling condition such that participants in the Self-Signal: Positive conditions are more likely to take all risks relative to participants in the Self-Signal: Negative conditions ($\beta_{\text{Self-Signal: Positive}} = .15$, Delta-Method SE = .05, z = 2.84, $p = .005$; fitted values: Positive = 3.80, Negative = 3.65). This suggests that the prior risk

also sends a signal about general risk attitude (i.e., in the Self-Signal: Negative condition, participants are less likely to take all risks).

STUDY 4: THE ROLE OF OUTCOME FEEDBACK

We recruited 1,000 participants, but thirty-nine participants were dropped for failing an Instructional Manipulation Check, leaving 961 participants. The subsequent risks we used were (domain is specified in parentheses): betting a day's income on a sporting event (financial), not wearing a seatbelt while riding in the front seat of a car (health/safety), bungee-jumping off a tall bridge (recreational), taking credit for work that is not your own (ethical), disagreeing with a group of friends (social).

Table 20A Regression Results for Similarity, Study 4

DV: Similarity	(1)	(2)	(3)
Match	25.51***	25.51***	12.77***
	(.87)	(.87)	(.43)
Outcome Condition		-.45	.27
		(1.11)	(.61)
Match x Outcome Condition			.82+
			(.43)
Constant	7.94***	8.15***	20.70***
	(1.52)	(1.60)	(1.54)
Random Effects	Individual		
Fixed Effects	Prior Risk Domain Subsequent Risk Domain		
N	4,805 (961 groups)		
R^2	.14	.14	.14

*+ p < .10, * p < .05, ** p < .01, *** p < .001*

Notes: (1) The regressions are random effects regressions of similarity including random effects for participant and fixed effects for prior and subsequent risk domain. (2) Match is an indicator variable for whether the domain of the subsequent risk matched the domain of the prior risk. In Regressions 1 and 2, this variable is dummy-coded (0 = did not match, 1 = match). In Regression 3, this variable is contrast-coded (-1 = did not match, 1 = match). (3) Outcome Condition is an indicator variable for outcome condition assignment. In Regressions 1 and 2, this variable is dummy-coded (0 = Negative condition, 1 = Positive condition). In Regression 3, this variable is contrast-coded (-1 = Negative condition, 1 = Positive condition). (4) Standard errors are listed in parentheses below each coefficient.

Table 21A Regression Results for Risk Perception, Study 4

DV: Risk Perception	(1)	(2)	(3)
Match	.10*	.10*	.05*
	(.05)	(.05)	(.03)
Outcome Condition		-.06	-.03
		(.06)	(.03)
Match x Outcome Condition			.01
			(.03)
Constant	4.90***	4.94***	4.95***
	(.08)	(.09)	(.08)
Random Effects	Individual		
Fixed Effects	Prior Risk Domain Subsequent Risk Domain		
N	4,805 (961 groups)		
R^2	.30	.30	.30

*+ p < .10, * p < .05, ** p < .01, *** p < .001*

Notes: (1) These regressions are random effects regressions of risk perception including random effects for participant and fixed effects for prior and subsequent risk domain. (2) Match is an indicator variable for whether the domain of the subsequent risk matched the domain of the prior risk. In Regressions 1 and 2, this variable is dummy-coded (0 = did not match, 1 = match). In Regression 3, this variable is contrast-coded (-1 = did not match, 1 = match). (3) Outcome Condition is an indicator variable for outcome condition assignment. In Regressions 1 and 2, this variable is dummy-coded (0 = Negative condition, 1 = Positive condition). In Regression 3, this variable is contrast-coded (-1 = Negative condition, 1 = Positive condition). (4) Standard errors are listed in parentheses below each coefficient.

Table 22A Regression Results for Risk-Taking Likelihood, Study 4

DV: Risk-Taking Likelihood	(1)	(2)	(3)	(4)	(5)
Match	.11+		.05+	.11+	
	(.06)		(.03)	(.06)	
Similarity		.01***			.01***
		(.001)			(.001)
Outcome Condition			.04	.07	.07
			(.03)	(.06)	(.07)
Match x Outcome Condition			.01		
			(.03)		
Similarity x Outcome Condition					-.00005
					(.002)
Risk Perception	-.54***	-.53***	-.53***	-.53***	-.53***
	(.02)	(.02)	(.02)	(.02)	(.02)
Constant	4.98***	4.92***	5.03***	4.94***	4.88***
	(.11)	(.11)	(.11)	(.11)	(.11)
Random Effects	Individual				
Fixed Effects	Prior Risk Domain Subsequent Risk Domain				
N	4,805 (961 groups)				
R^2	.38	.39	.38	.38	.39

*+ p < .10, * p < .05, ** p < .01, *** p < .001*

Notes: (1) These regressions are random effects regressions of risk-taking likelihood including random effects for participant and fixed effects for prior and subsequent risk domain. (2) Match is an indicator variable for whether the domain of the subsequent risk matched the domain of the prior risk. In Regressions 1 and 4, this variable is dummy-coded (0 = did not match, 1 = match). In Regression 3, this variable is contrast-coded (-1 = did not match, 1 = match). (3) Outcome Condition is an indicator variable for outcome condition assignment. In Regressions 1 and 4, this variable is dummy-coded (0 = Negative condition, 1 = Positive condition). In Regression 3, this variable is contrast-coded (-1 = Negative condition, 1 = Positive condition). (4) Standard errors are listed in parentheses below each coefficient.

Table 23A Regression Results for Process Measures, Study 4

	(1) *Self-Efficacy Index*	(2) *Self-Perception*	(3) *Risk-Taking Likelihood*
Match	.25***	.23***	-.03
	(.05)	(.05)	(.05)
Outcome Condition	.07	.02	.05
	(.05)	(.06)	(.04)
Self-Efficacy Index			.12***
			(.02)
Self-Perception			.47***
			(.01)
Risk Perception	-.24***	-.40***	-.31***
	(.01)	(.01)	(.01)
Constant	3.99***	3.76***	2.68***
	(.10)	(.11)	(.12)
Random Effects		Individual	
Fixed Effects		Prior Risk Domain Subsequent Risk Domain	
N		4,805 (961 groups)	
R^2	.40	.34	.53

** p < .05, ** p < .01, *** p < .001*

Notes: (1) These regressions are random effects regressions including random effects for participant and fixed effects for prior and subsequent risk domain. (2) Match is a dummy-coded indicator where 1 = domain of the subsequent risk matched the domain of the prior risk, 0 = domain of the subsequent risk matched the domain of the prior risk. (3) Outcome Condition is a dummy-coded indicator for condition assignment where 1 = Positive Outcome condition, 0 = Negative Outcome condition. (4) Standard errors are listed in parentheses below each coefficient.

Process. Since we measured feelings of familiarity and experience (self-efficacy) and self-perception for each subsequent risk, we can test for mediation of the matching effect jointly by self-efficacy and self-perception. Feelings of experience and familiarity were highly correlated ($r = 0.57$, $p < .001$) and combined into a single self-efficacy index. Both self-efficacy and self-perception are significantly different by match (self-efficacy: $\beta_{Match} = .25$, SE = .05, $z = 5.26$, $p < .001$; fitted

values: Match = 3.70, No-Match = 3.46; self-perception: β_{Match} = .23, SE = .05, z = 4.64, $p < .001$; fitted values: Match = 2.98, No-Match = 2.75).

To test for mediation, we ran Hayes' (2013) bootstrapped (50,000 iterations) multiple mediation model (Model 6) with risk-taking likelihood as the dependent variable, the dummy-coded match indicator as the independent variable, self-efficacy index and self-perception as the mediators, risk perception and the dummy-coded indicator for the Positive Outcome condition as covariates, and fixed effects for participant, prior risk domain, and subsequent risk domain. This analysis finds indirect-only mediation by both self-efficacy (a x b = .03, SE = .01, z = 2.68, p = .007, 95% bias-corrected CI: [.01, .05]) and self-perception (a x b = .10, SE = .02, z = 4.24, $p <$ .001, 95% bias-corrected CI: [.06, .15]). The direct effect of matching domain on risk-taking likelihood is no longer significant (p = .38). This replicates our finding that risk intentions are higher for subsequent similar risks because the prior risk-taking experience both increases feelings of self-efficacy for similar risks and signals to the individual that they prefer risks that are more similar to the prior risk.

STUDY 5: THE EFFECT OF SIMILARITY IN AN INCENTIVE COMPATIBLE SETTING

We recruited 450 participants. Of these, eleven (2.4%) dropped out when they were told they would have to take a risk that could not be described in any detail beforehand. This represents general selection bias—those participants who were unwilling to engage in general risk-taking. A further twenty participants (4.6%) dropped out after seeing the specific prior risk they would have to take. The dropout rate was significantly different by prior risk domain assignment, such that significantly more participants dropped out of the Social prior risk than the Financial prior risk (Social = 17 vs. Financial = 3; $\chi^2(1) = 9.87$, $p = .002$). This represents domain-specific selection bias—those participants who were unwilling to take a specific risk in an assigned domain. Finally, an additional forty participants were dropped for failing an Instructional Manipulation Check.

In the procedure for selecting the actual subsequent risk, participants were told that after providing responses to the remaining questions in the survey, the computer would randomly draw either the number 1 or the number 2 with equal likelihood. The number drawn would correspond to one of the two subsequent risk-taking likelihood questions, which the participant would then have the opportunity to actually take. In actuality, the number 2 was always displayed, but the corresponding subsequent risk was randomized and counterbalanced across participants. If the social risk was chosen, the specific instructions for posting were: "You must post something about your personal beliefs on your personal social media site (e.g., on your Facebook timeline, a tweet on Twitter, or a post on Instagram). This post must not be private. This post can be about anything you believe in (e.g., about a political issue, about something you like or don't like, etc.)." If participants did not have any social media presence, they were asked to email the researcher directly stating this. Only two participants contacted the researcher.

Table 24A Regression Results for Similarity, Study 5

DV: Similarity	(1)	(2)	(3)
Match	42.02***	42.02***	21.04***
	(1.65)	(1.65)	(0.83)
Outcome Received		.34	.17
		(1.65)	(.83)
Match x Outcome Received			0.49
			(0.83)
Constant	24.31***	26.85***	48.00***
	(1.53)	(1.85)	(1.40)
Random Effects		Individual	
Fixed Effects	Individual Subsequent Risk Domain	Prior Risk Domain Subsequent Risk Domain	
N		758 (379 groups)	
R^2	.48	.49	.49

** p < .05, ** p < .01, *** p < .001*

Notes: (1) Regression 1 is a fixed effects regression of similarity including fixed effects for participant and subsequent risk domain. Regressions 2 and 3 are random effects regressions of similarity including random effects for participant and fixed effects for prior and subsequent risk domain. (2) Match is an indicator variable for whether the domain of the subsequent risk matched the domain of the prior risk. In Regressions 1 and 2, this variable is dummy-coded (0 = did not match, 1 = match). In Regression 3, this variable is contrast-coded (-1 = did not match, 1 = match). (3) Outcome Received is an indicator variable for the outcome the participant received in the prior risk. In Regressions 1 and 2, this variable is dummy-coded (1 = Positive, 0 = Negative). In Regression 3, this variable is contrast-coded (-1 = Negative, 1 = Positive). (4) Standard errors are listed in parentheses below each coefficient.

Table 25A Regression Results for Risk Perception, Study 5

DV: Risk Perception	(1)	(2)	(3)
Match	.001	.001	.001
	(.10)	(.10)	(.05)
Outcome Received		-.07	-.03
		(.11)	(.06)
Match x Outcome Received			-.002
			(.05)
Constant	2.86***	2.90***	2.86***
	(.10)	(.12)	(.09)
Random Effects		Individual	
Fixed Effects		Prior Risk Domain Subsequent Risk Domain	
N		758 (379 groups)	
R^2	.06	.06	.06

** p < .05, ** p < .01, *** p < .001*

Notes: (1) The regressions are random effects regressions of risk perception including random effects for participant and fixed effects for prior and subsequent risk domain. (2) Match is an indicator variable for whether the domain of the subsequent risk matched the domain of the prior risk. In Regressions 1 and 2, this variable is dummy-coded (0 = did not match, 1 = match). In Regression 3, this variable is contrast-coded (-1 = did not match, 1 = match). (3) Outcome Received is an indicator variable for the outcome the participant received in the prior risk. In Regressions 1 and 2, this variable is dummy-coded (1 = Positive, 0 = Negative). In Regression 3, this variable is contrast-coded (-1 = Negative, 1 = Positive). (4) Standard errors are listed in parentheses below each coefficient.

Table 26A Regression Results for Risk-Taking Likelihood, Study 5

DV: Risk-Taking Likelihood	(1)	(2)	(3)	(4)
Match	.54***		.27***	.54***
	(.09)		(.05)	(.09)
Similarity		.01***		
		(.002)		
Outcome Received			-.05	-.10
			(.05)	(.11)
Match x Outcome Received			-.03	
			(.05)	
Risk Perception	-.36***	-.37***	-.37***	-.37***
	(.04)	(.04)	(.04)	(.04)
Constant	5.36***	5.31***	5.63***	5.41***
	(.14)	(.15)	(.13)	(.15)
Random Effects		Individual		
Fixed Effects		Prior Risk Domain Subsequent Risk Domain		
N		758 (379 groups)		
R^2	.22	.21	.22	.22

*+ p < .10, * p < .05, ** p < .01, *** p < .001*

Notes: (1) The regressions are random effects regressions of risk-taking likelihood including random effects for participant and fixed effects for prior and subsequent risk domain. (2) Match is an indicator variable for whether the domain of the subsequent risk matched the domain of the prior risk. In Regressions 1 and 4, this variable is dummy-coded (0 = did not match, 1 = match). In Regression 3, this variable is contrast-coded (-1 = did not match, 1 = match). (3) Outcome Received is an indicator variable for the outcome the participant received in the prior risk. In Regressions 1 and 4, this variable is dummy-coded (1 = Positive, 0 = Negative). In Regression 3, this variable is contrast-coded (-1 = Negative, 1 = Positive). (4) Standard errors are listed in parentheses below each coefficient.

Table 27A Regression Results for Process Measures, Study 5

	(1) *Self-Efficacy Index*	(2) *Self-Signaling Index*	(3) *Risk-Taking Likelihood*
Match	.01	.32**	.40***
	(.10)	(.10)	(.08)
Outcome Received	-.004	-.08	-.06
	(.12)	(.14)	(.09)
Self-Efficacy Index			.09**
			(.03)
Self-Signaling Index			.42***
			(.03)
Risk Perception	-.16***	-.33***	-.21***
	(.04)	(.04)	(.03)
Constant	4.75***	5.10***	2.86***
	(.16)	(.18)	(.21)
Random Effects		Individual	
Fixed Effects		Prior Risk Domain Subsequent Risk Domain	
N		758 (379 groups)	
R^2	.03	.16	.43

** p < .05, ** p < .01, *** p < .001*

Notes: (1) The regressions are random effects regressions including random effects for participant and fixed effects for prior and subsequent risk domain. (2) The DV of the regression is specified at the top of each column. (2) Match is a dummy-coded indicator variable, where 1 = the domain of the subsequent risk matched the domain of the prior risk, 0 = the domain of the subsequent risk did not match the domain of the prior risk. (3) Outcome Received is a dummy-coded indicator for the outcome the participant received in the prior risk (1 = Positive, 0 = Negative). (4) Standard errors are listed in parentheses below each coefficient.

In the following we conducted sensitivity analyses for the dropouts in Study 5. First, since the dropout rate was significantly lower in the Financial condition, we tested whether the effect of match and perceived similarity held when only evaluating this condition. Results for this analysis are shown in Table 28A. We note that the increase in effect for the interaction of match and outcome is likely driven by the much higher similarity of the risks in this condition; 50% of participants in the financial condition rated similarity between the prior and sequential risk at 70 or higher. The main paper's General Discussion includes a deeper consideration of when high similarity may increase the role of prior outcomes on risk taking, consistent with the interaction reported here.

Table 28A Regression Results for Risk-Taking Likelihood, Study 5 – Financial Condition Only

DV: Risk-Taking Likelihood	(1)	(2)	(3)
Match	1.14***		.57***
	(.09)		(.06)
Similarity		.01	
		(.002)	
Outcome Received			-.09
			(.07)
Match x Outcome Received			-.15*
			(.06)
Risk Perception	-.37***	-.39***	-.37***
	(.05)	(.05)	(.05)
Constant	4.77***	4.79***	5.35***
	(.19)	(.21)	(.17)
Random Effects		Individual	
Fixed Effects		Subsequent Risk Domain	
N		400 (200 groups)	
R^2	.29	.26	.31

** p < .05, ** p < .01, *** p < .001*

Notes: (1) The regressions are random effects regressions of risk-taking likelihood including random effects for participant and fixed effects for subsequent risk domain. (2) Match is an indicator variable for whether the domain of the subsequent risk matched the domain of the prior risk. In Regressions 1 and 4, this variable is dummy-coded (0 = did not match, 1 = match). In Regression 3, this variable is contrast-coded (-1 = did not match, 1 = match). (3) Outcome Received is an indicator variable for the outcome the participant received in the prior risk. In Regressions 1 and 4, this variable is dummy-coded (1 = Positive, 0 = Negative). In Regression 3, this variable is contrast-coded (-1 = Negative, 1 = Positive). (4) Standard errors are listed in parentheses below each coefficient.

We then set the risk-taking likelihood values for all dropout participants equal to 1 for matching risks and 6 for non-matching risks, and kept these participants instead of dropping them (filling in values that are contrary to our hypothesis). We also set risk perception to 7 for the matching risks and 1 for the non-matching risks. For prior outcome, we assigned a random uniform number between 0 and 1 across all observations. We then assigned a prior win to drop outs if the random number was less than or equal to 0.50; we assigned a prior loss to drop outs if the random number was greater than 0.50. We did not fill in similarity values, so this data is not reported. The results from this analysis are shown in Table 29A. These results still find a significant positive effect of match on risk-taking likelihood.

Table 29A Regression Results for Risk-Taking Likelihood with Dropouts Included, Study 5

	(1)	(2)	(3)
Match	.42***	.21***	.42***
	(.09)	(.05)	(.09)
Outcome Received		-.05	-.09
		(.05)	(.10)
Match x Outcome Received		-.02	
		(.05)	
Risk Perception	-.46***	-.46***	-.46***
	(.03)	(.03)	(.03)
Constant	5.71***	5.92***	5.76***
	(.13)	(.12)	(.14)
Random Effects	Individual		
Fixed Effects	Prior Risk Domain Subsequent Risk Domain		
N	798 (399 groups)		
R^2	.28	.28	.28

*+ p < .10, * p < .05, ** p < .01, *** p < .001*

Notes: (1) The regressions are random effects regressions of risk-taking likelihood including random effects for participant and fixed effects for prior and subsequent risk domain. (2) Match is an indicator variable for whether the domain of the subsequent risk matched the domain of the prior risk. In Regressions 1 and 4, this variable is dummy-coded (0 = did not match, 1 = match). In Regression 3, this variable is contrast-coded (-1 = did not match, 1 = match). (3) Outcome Received is an indicator variable for the outcome the participant received in the prior risk. In Regressions 1 and 4, this variable is dummy-coded (1 = Positive, 0 = Negative). In Regression 3, this variable is contrast-coded (-1 = Negative, 1 = Positive). (4) Standard errors are listed in parentheses below each coefficient.

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Web Appendix B

PILOT STUDY

All participants were asked to rate the similarity between twenty risky activities using pairwise comparisons. The entire survey consisted of 190 pairwise comparisons and participants were told the survey would take approximately 15 minutes to complete (the actual average time to complete the survey was 14.6 minutes).

Participants were given the instructions below:

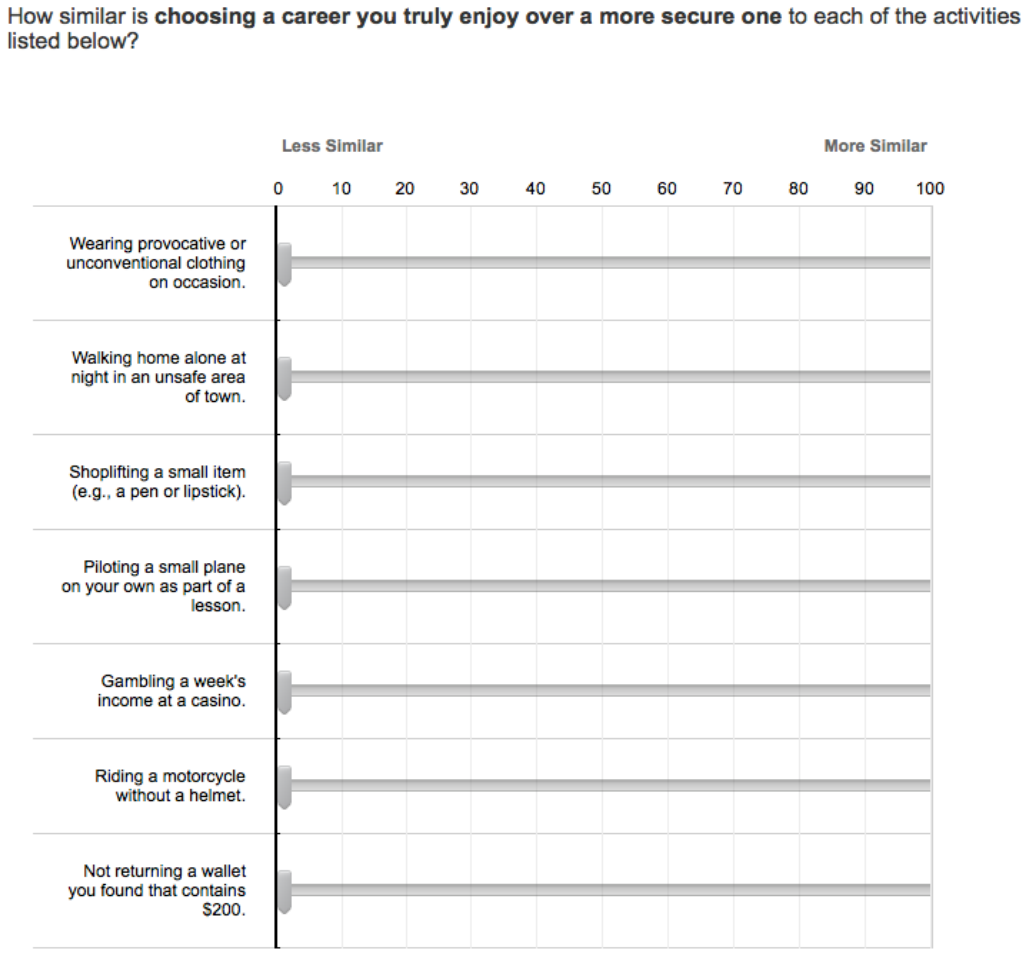
> In the following, you will see questions about several activities. The responses that you provide will be in the form of similarity judgments. That is, you will be asked to judge the similarity between all possible pairs of activities using a continuous scale from 0 (Completely Different) to 100 (Identical – No Difference). This means that if you think that two activities are not at all alike, you should rate them closer to 0, whereas, if you think two activities are very similar, you should rate them closer to 100. Where items fall in the range between 0 and 100 is your determination.
>
> Remember, your similarity ratings are based on your own perception and assessment. Use your best judgment when determining similarity between activities, but do not worry about the "right" answer as there isn't one!

The twenty risky activities used were as follows (the domain of the activity is specified in parentheses, but this information was not provided to the participants). The order of the risks was randomized for each participant:

1. Asking your boss for a raise. (Social)
2. Wearing provocative or unconventional clothing on occasion. (Social)
3. Choosing a career you truly enjoy over a more secure one. (Social)
4. Speaking your mind about an unpopular issue in a meeting at work. (Social)
5. Buying an illegal drug for your own use. (Ethical)
6. Not returning a wallet you found that contains $200. (Ethical)
7. Passing off somebody else's work as your own. (Ethical)
8. Shoplifting a small item (e.g., a pen or lipstick). (Ethical)

9. Purchasing a lottery ticket. (Financial)
10. Betting a day's income on the outcome of a sporting event. (Financial)
11. Gambling a week's income at a casino. (Financial)
12. Investing 10% of your annual income in a speculative stock. (Financial)
13. Riding a motorcycle without a helmet. (Health/Safety)
14. Walking home alone at night in an unsafe area of town. (Health/Safety)
15. Driving a car without wearing a seatbelt. (Health/Safety)
16. Ignoring some persistent physical pain by not going to the doctor. (Health/Safety)
17. Piloting a small plane on your own as part of a lesson. (Recreational)
18. Going bungee jumping off of a tall bridge. (Recreational)
19. Traveling on a commercial airplane. (Recreational)
20. Going scuba diving in the open ocean. (Recreational)

As an example of the task participants were asked to complete, the following is the set-up participants saw for one of the risky activities (choosing a career you truly enjoy over a more secure one):



STUDY 1

Participants were randomly assigned to one of five prior risk domains (Ethical, Financial, Health/Safety, Recreational, Social). Participants were asked to write about a time they took a risk in the domain they were assigned to. The manipulation is shown below, with domain assignment in parentheses.

> (Ethical) Ethical risks are defined as any risks that involve immoral/moral or unethical/ethical behavior. Some examples of ethical risks include: taking questionable deductions on your income tax return, revealing a friend's secret to someone else, and not returning a wallet you found that contains money. Think back to a time when you took an ethical risk in your life. Try to think of the most recent experience possible.
>
> Please describe, in about a paragraph, what the experience of taking this ethical risk was like for you. Write your paragraph as if describing to someone what you went through, how you felt during the experience and what you thought about. Please be as specific as possible.

> (Financial) Financial risks are defined as any risks that involve financial gain or loss. Some examples of financial risks include: gambling money at a casino, buying a lottery ticket, and playing a high-stakes poker game. Think back to a time when you took a financial risk in your life. Try to think of the most recent experience possible.
>
> Please describe, in about a paragraph, what the experience of taking this financial risk was like for you. Write your paragraph as if describing to someone what you went through, how you felt during the experience and what you thought about. Please be as specific as possible.

> (Health/Safety) Health/safety risks are defined as any risks that involve your physical health or put you in a potentially unsafe situation. Some examples of health/safety risks include: drinking heavily at a social function, engaging in unprotected sex, and riding a bicycle without a helmet. Think back to a time when you took a health/safety risk in your life. Try to think of the most recent experience possible.
>
> Please describe, in about a paragraph, what the experience of taking this health/safety risk was like for you. Write your paragraph as if describing to someone what you went through, how you felt during the experience and what you thought about. Please be as specific as possible.

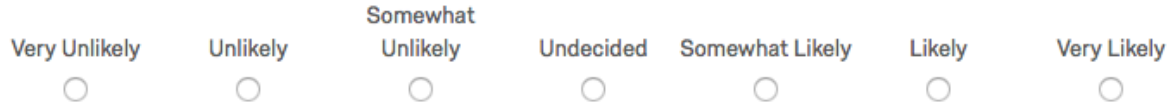
(Recreational) Recreational risks are defined as any risks that involve an adrenaline rush, physical exertion, and unique experiences. Some examples of recreational risks include: skydiving, going whitewater rafting at high water, and periodically engaging in a dangerous sport (e.g. mountain climbing or snowboarding). Think back to a time when you took a recreational risk in your life. Try to think of the most recent experience possible.

Please describe, in about a paragraph, what the experience of taking this recreational risk was like for you. Write your paragraph as if describing to someone what you went through, how you felt during the experience and what you thought about. Please be as specific as possible.

(Social) Social risks are defined as any risks that involve your relationships with friends, family, co-workers, or authority figures. Some examples of social risks include: wearing provocative clothing, disagreeing with an authority figure, and moving far away from your family. Think back to a time when you took a social risk in your life. Try to think of the most recent experience possible.

Please describe, in about a paragraph, what the experience of taking this social risk was like for you. Write your paragraph as if describing to someone what you went through, how you felt during the experience and what you thought about. Please be as specific as possible.

All participants were then asked the following five subsequent risk questions, with domain specified in parentheses. The response scale for all of the subsequent risks was a seven-point scale from "Very Unlikely" to "Very Likely." The order of the subsequent risks was randomized across participants.



(Ethical) Suppose that you want to buy a new software program, which is moderately expensive. You find out that you can download it illegally online for free. How likely are you to illegally download a piece of software?

(Financial) Suppose that you and a friend are at a sporting event and one of your friends asks if you want to make a bet on the outcome of the event. How likely are you to bet a day's income on the outcome of a sporting event?

(Health/Safety) Suppose that your friend picks you up to a go to a movie. When they arrive, they tell you that the passenger-side seatbelt in their car isn't working. How likely are you to ride in their car without wearing a seatbelt?

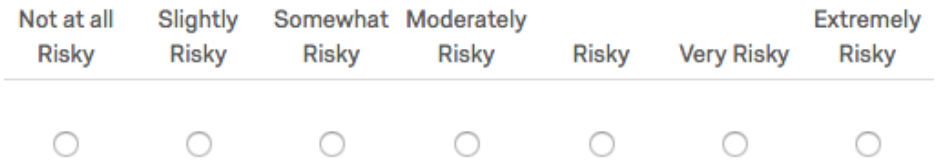
(Recreational) Suppose that your friend is going bungee jumping off of a tall bridge over a river. They invite you to come along. How likely are you to go bungee jumping?

(Social) Suppose that you are at a dinner party with your friends. One of your friends brings up a hot topic in politics. As your other friends join in the discussion, you realize you have different opinions from those of your friends. How likely are you to express your contradictory opinions in front of a group of your friends?

All participants then rated perceived risk for the subsequent risks using the instructions and scale below:

People often see some risk in situations that contain uncertainty about what the outcome or consequences will be and for which there is the possibility of negative consequences. However, riskiness is a very personal and intuitive notion, and we are interested in your gut level assessment of how risky each situation or behavior is.

For each of the following statements, please indicate how risky you perceive each activity to be were you to participate in the stated activity.

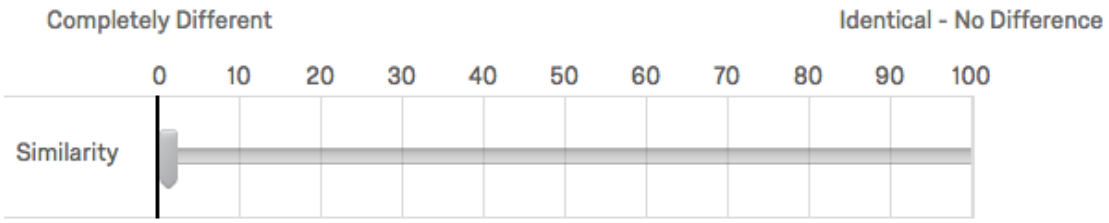


All participants then rated the similarity between the risk they wrote about and each of the subsequent risks using the instructions and scale below:

For the next few questions, please **think about the risk you wrote about** in the beginning of this survey.

Using a scale from 0 (Completely Different) to 100 (Identical - No Difference), think about **how similar the risk you wrote about is to each of the risky activities specified.**

If you think that the two activities are not at all alike, you should rate them closer to 0, whereas, if you think the two activities are very similar, you should rate them closer to 100. Where items fall in the range between 0 and 100 is your determination.



All participants provided demographic information at the end of the survey.

What gender do you identify with? (Female, Male, Rather not say)
How old are you (in years)?

STUDY 2

Participants were randomly assigned to one of two prior risk conditions (Riding a Motorcycle or Dangerous Job). Within each prior risk condition, participants were further randomly assigned to one of two risk frames. In the Riding a Motorcycle condition, participants were assigned to either a Health/Safety or Recreational frame; in the Dangerous Job condition, participants were assigned to either a Financial or Health/Safety frame. The writing prompt varied by frame assignment and the subsequent risk questions varied by prior risk condition. The instructions and questions for all conditions are shown below.

> [Riding a Motorcycle Prior Risk Condition] Please imagine the following: This weekend you rode on a motorcycle without a helmet. Your friend let you borrow his motorcycle but he didn't have a helmet that you could use. You took the motorcycle out on a highway and some side streets.
>
> > [Health/Safety Framing] Many people would consider there to be several health and/or safety implications related to the decision to ride a motorcycle without a helmet. Health/safety implications include potential physical harm, mental trauma, and pleasant or unpleasant health outcomes. We would like you to list the main health and/or safety implications that you can think of that are associated with this particular action.
> >
> > [Recreational Framing] Many people would consider there to be several recreational implications related to the decision to ride a motorcycle without a helmet. Recreational implications include physical overexertion, extreme emotional feelings, and memorable experiences. We would like you to list the main recreational implications that you can think of that are associated with this particular action.

Participants in the Riding a Motorcycle condition saw the following questions regardless of framing assignment:

1. [Recreational subsequent risk] Suppose that you are on vacation and there is an activity package that involves bungee jumping. The jump takes place off of a tall bridge over a canyon with a river at the bottom. How likely would you be to go bungee jumping?

Very Unlikely	Unlikely	Somewhat Unlikely	Undecided	Somewhat Likely	Likely	Very Likely
○	○	○	○	○	○	○

2. [Health/Safety subsequent risk] Suppose that you meet someone at a bar and really hit it off with them. They invite you back to their place. Suppose that you are not in a relationship with anyone else, how likely would you be to engage in unprotected sex with the person from the bar?

Very Unlikely	Unlikely	Somewhat Unlikely	Undecided	Somewhat Likely	Likely	Very Likely
○	○	○	○	○	○	○

[Risk Perception] People often see some risk in situations that contain uncertainty about what the outcome or consequences will be and for which there is the possibility of negative consequences. However, riskiness is a very personal and intuitive notion, and we are interested in your gut level assessment of how risky each activity listed below is. For the next two questions, please indicate how risky you perceive each activity to be using the scale provided.

1. Going bungee jumping.

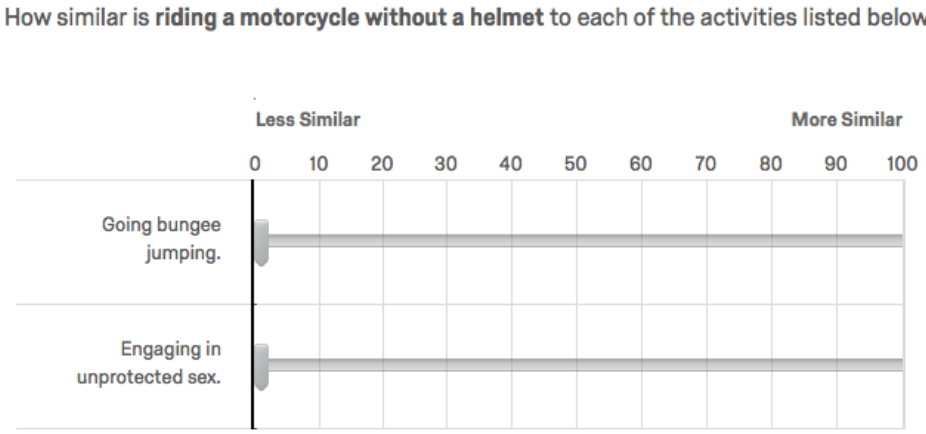
Not at all Risky	Slightly Risky	Somewhat Risky	Moderately Risky	Risky	Very Risky	Extremely Risky
○	○	○	○	○	○	○

2. Engaging in unprotected sex.

Not at all Risky	Slightly Risky	Somewhat Risky	Moderately Risky	Risky	Very Risky	Extremely Risky
○	○	○	○	○	○	○

[Perceived Similarity] In the following, you will see questions asking you to judge the similarity between the activities you previously evaluated. That is, you will be asked to judge the similarity between the activities using a continuous scale from 0 (Completely Different) to 100 (Identical - No Difference). This means that if you think that two activities are not at all alike, you should rate them closer to 0, whereas, if you think two activities are very similar, you should rate them closer to 100.

Where items fall in the range between 0 and 100 is your determination. Remember, your similarity ratings are based on your own perception and assessment. Use your best judgment when determining similarity between activities, but do not worry about the "right" answer as there isn't one!



[Dangerous Job Prior Risk Condition] Please imagine the following: This weekend you decided to start working a second job part-time to make a little extra money. The job pays pretty well and has good hours, but it is at a packing facility so the employer warned you that there is the possibility of getting injured on the job.

> [Financial Framing] Many people would consider there to be several financial implications related to the decision to take on a dangerous job. Financial implications include losing or gaining money, not staying within a budget, and the ability to cover expenses. We would like you to list the main financial implications that you can think of that are associated with this particular action.
>
> [Health/Safety Framing] Many people would consider there to be several health and/or safety implications related to the decision to take on a dangerous job. Health/safety implications include potential physical harm, mental trauma, and pleasant or unpleasant health outcomes. We would like you to list the main health and/or safety implications that you can think of that are associated with this particular action.

Participants in the Dangerous Job condition saw the following questions regardless of framing assignment:

1. [Financial subsequent risk] Suppose that you are invited to the horse races. How likely would you be to bet a day's worth of income at the horse races?

Very Unlikely	Unlikely	Somewhat Unlikely	Undecided	Somewhat Likely	Likely	Very Likely
○	○	○	○	○	○	○

2. [Health/Safety subsequent risk] Suppose that you meet someone at a bar and really hit it off with them. They invite you back to their place. Suppose that you are not in a relationship with anyone else, how likely would you be to engage in unprotected sex with the person from the bar?

Very Unlikely	Unlikely	Somewhat Unlikely	Undecided	Somewhat Likely	Likely	Very Likely
○	○	○	○	○	○	○

[Risk Perception] People often see some risk in situations that contain uncertainty about what the outcome or consequences will be and for which there is the possibility of negative consequences. However, riskiness is a very personal and intuitive notion, and we are interested in your gut level assessment of how risky each activity listed below is. For the next two questions, please indicate how risky you perceive each activity to be using the scale provided.

1. Engaging in unprotected sex.

Not at all Risky	Slightly Risky	Somewhat Risky	Moderately Risky	Risky	Very Risky	Extremely Risky
○	○	○	○	○	○	○

2. Betting a day's worth of income at the horse races.

Not at all Risky	Slightly Risky	Somewhat Risky	Moderately Risky	Risky	Very Risky	Extremely Risky
○	○	○	○	○	○	○

[Perceived Similarity] In the following, you will see questions asking you to judge the similarity between the activities you previously evaluated. That is, you will be asked to judge the similarity between the activities using a continuous scale from 0 (Completely Different) to 100 (Identical - No Difference). This means that if you think that two activities are not at all alike, you should rate them closer to 0, whereas, if you think two activities are very similar, you should rate them closer to 100.

Where items fall in the range between 0 and 100 is your determination. Remember, your similarity ratings are based on your own perception and assessment. Use your best judgment when determining similarity between activities, but do not worry about the "right" answer as there isn't one!

All participants answered the following demographic questions:

1. What is your gender? (Male, Female)
2. How old are you? (in years)

STUDY 2 POST-TEST (SIMILARITY)

Participants were randomly assigned to one of two prior risk conditions (Riding a Motorcycle or Dangerous Job). Within each prior risk condition, participants were further randomly assigned to one of two risk frames. In the Riding a Motorcycle condition, participants were assigned to either a Health/Safety or Recreational frame; in the Dangerous Job condition, participants were assigned to either a Financial or Health/Safety frame. Participants were asked to write about the implications of taking the [assigned risk frame] risk. After the writing prompt, participants responded to two similarity questions. The writing prompt varied by frame assignment and the subsequent similarity questions varied by prior risk condition. The instructions and questions for all conditions are shown below.

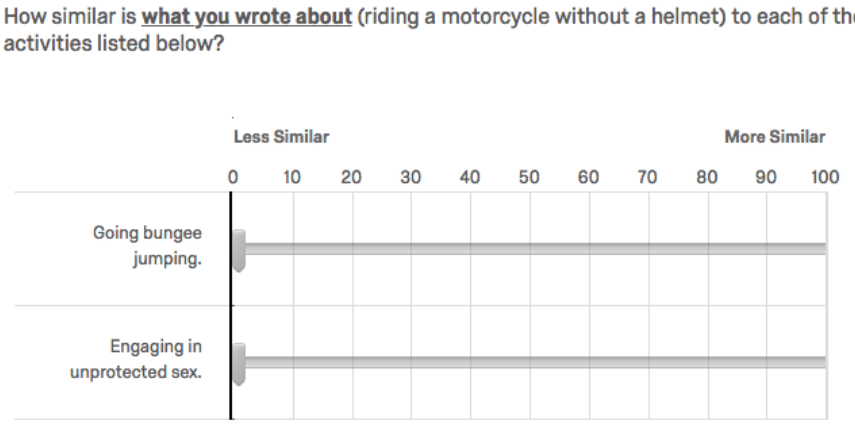
> [Riding a Motorcycle Prior Risk Condition] Please imagine the following: This weekend you rode on a motorcycle without a helmet. Your friend let you borrow his motorcycle but he didn't have a helmet that you could use. You took the motorcycle out on a highway and some side streets.

[Health/Safety Framing] Many people would consider there to be several health and/or safety implications related to the decision to ride a motorcycle without a helmet. Health/safety implications include potential physical harm, mental trauma, and pleasant or unpleasant health outcomes. We would like you to list the main health and/or safety implications that you can think of that are associated with this particular action.

[Recreational Framing] Many people would consider there to be several recreational implications related to the decision to ride a motorcycle without a helmet. Recreational implications include physical overexertion, extreme emotional feelings, and memorable experiences. We would like you to list the main recreational implications that you can think of that are associated with this particular action.

[Perceived Similarity] In the following, you will see questions asking you to judge the similarity between the activities you previously evaluated. That is, you will be asked to judge the similarity between the activities using a continuous scale from 0 (Completely Different) to 100 (Identical - No Difference). This means that if you think that two activities are not at all alike, you should rate them closer to 0, whereas, if you think two activities are very similar, you should rate them closer to 100.

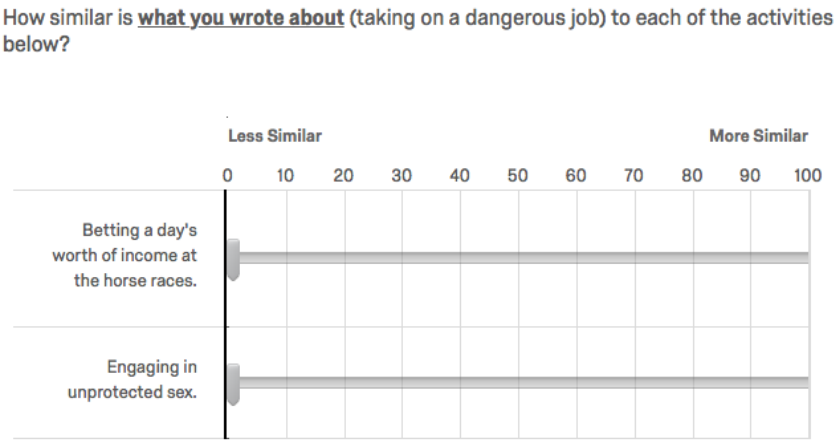
Where items fall in the range between 0 and 100 is your determination. Remember, your similarity ratings are based on your own perception and assessment. Use your best judgment when determining similarity between activities, but do not worry about the "right" answer as there isn't one!



[Dangerous Job Prior Risk Condition] Please imagine the following: This weekend you decided to start working a second job part-time to make a little extra money. The job pays pretty well and has good hours, but it is at a packing facility so the employer warned you that there is the possibility of getting injured on the job.

[Financial Framing] Many people would consider there to be several financial implications related to the decision to take on a dangerous job. Financial implications include losing or gaining money, not staying within a budget, and the ability to cover expenses. We would like you to list the main financial implications that you can think of that are associated with this particular action.

[Health/Safety Framing] Many people would consider there to be several health and/or safety implications related to the decision to take on a dangerous job. Health/safety implications include potential physical harm, mental trauma, and pleasant or unpleasant health outcomes. We would like you to list the main health and/or safety implications that you can think of that are associated with this particular action.



All participants answered the following demographic questions:

1. What is your gender? (Male, Female)
2. How old are you? (in years)

EXPLORATORY PROCESS STUDY

Participants were randomly assigned to one of five prior risk domains (Ethical, Financial, Health/Safety, Recreational, Social). Participants were asked to write about a time they took a risk in the domain they were assigned to. The manipulation is shown below, with domain assignment in parentheses.

> [Financial] Financial risks are defined as any risks that involve financial gain or loss. Some examples of financial risks include: gambling money at a casino, betting on a sporting event, betting at the horse races, and playing a high-stakes poker game. Think back to a time when you took a financial risk in your life. Try to think of the most recent experience possible.
>
> Please describe, in about a paragraph, what the experience of taking this financial risk was like for you. Write your paragraph as if describing to someone what you went through, how you felt during the experience and what you thought about. Please be as specific as possible.

> [Ethical] Ethical risks are defined as any risks that involve immoral/moral or unethical/ethical behavior. Some examples of ethical risks include: taking questionable deductions on your income tax return, passing off somebody else's work as your own, revealing a friend's secret to someone else, and not returning a wallet you found that contains money. Think back to a time when you took an ethical risk in your life. Try to think of the most recent experience possible.
>
> Please describe, in about a paragraph, what the experience of taking this ethical risk was like for you. Write your paragraph as if describing to someone what you went through, how you felt during the experience and what you thought about. Please be as specific as possible.

> [Health/Safety] Health/safety risks are defined as any risks that involve your physical health or put you in a potentially unsafe situation. Some examples of health/safety risks include: drinking heavily at a social function, engaging in unprotected sex, sunbathing without sunscreen, and walking home alone at night in an unsafe area of town. Think back to a time when you took a health/safety risk in your life. Try to think of the most recent experience possible.
>
> Please describe, in about a paragraph, what the experience of taking this health/safety risk was like for you. Write your paragraph as if describing to someone what you went through, how you felt during the experience and what you thought about. Please be as specific as possible.

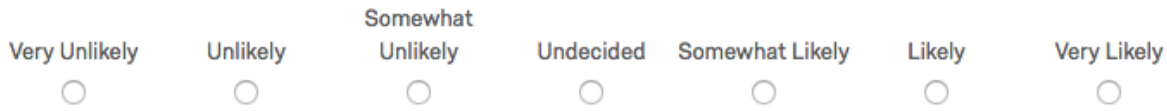
[Recreational] Recreational risks are defined as any risks that involve an adrenaline rush, physical exertion, and unique experiences. Some examples of recreational risks include: bungee jumping, snowboarding, skydiving, and backpacking in the remote wilderness. Think back to a time when you took a recreational risk in your life. Try to think of the most recent experience possible.

Please describe, in about a paragraph, what the experience of taking this recreational risk was like for you. Write your paragraph as if describing to someone what you went through, how you felt during the experience and what you thought about. Please be as specific as possible.

[Social] Social risks are defined as any risks that involve your relationships with friends, family, co-workers, or authority figures. Some examples of social risks include: admitting your tastes are different from those of your friends, wearing provocative clothing, disagreeing with an authority figure and moving far away from your family. Think back to a time when you took a social risk in your life. Try to think of the most recent experience possible.

Please describe, in about a paragraph, what the experience of taking this social risk was like for you. Write your paragraph as if describing to someone what you went through, how you felt during the experience and what you thought about. Please be as specific as possible.

All participants were then asked the following five subsequent risk questions, with domain specified in parentheses. The response scale for all of the subsequent risks was a seven-point scale from "Very Unlikely" to "Very Likely." The order of the subsequent risks was randomized across participants.



(Financial) Suppose that you and a friend are at a sporting event and one of your friends asks if you want to make a bet on the outcome of the event. Would you bet a day's income on the outcome of a sporting event?

(Health/Safety) Suppose that your friend picks you up to a go to a movie. When they arrive, they tell you that the passenger-side seatbelt in their car isn't working. Would you ride in their car without wearing a seatbelt while being a passenger in the front seat?

(Recreational) Suppose that your friend is going bungee jumping off of a tall bridge over a river. They invite you to come along. Would you go bungee jumping?

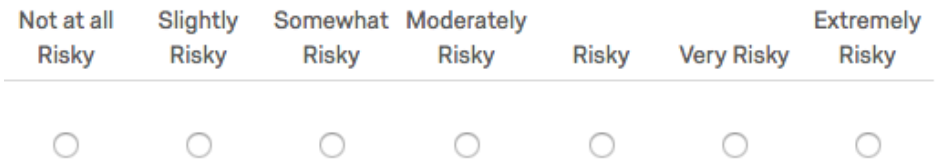
(Ethical) Suppose that your boss called you into their office. You had just given a presentation and they wanted to give you feedback. They said the presentation went well and they were especially impressed by the graphics. As it turns out, one of your co-workers did the graphics for you as a favor. Your boss is unaware of this. Would you take credit for the graphics that your co-worker did for you?

(Social) Suppose that you are at a dinner party with your friends. One of your friends brings up a hot topic in politics. As your other friends join in the discussion, you realize you have different opinions from those of your friends. Would you express your contradictory opinions in front of a group of your friends?

All participants then rated perceived risk for the subsequent risks using the instructions and scale below:

People often see some risk in situations that contain uncertainty about what the outcome or consequences will be and for which there is the possibility of negative consequences. However, riskiness is a very personal and intuitive notion, and we are interested in your gut level assessment of how risky each situation or behavior is.

For each of the following statements, please indicate how risky you perceive each activity to be were you to participate in the stated activity.



Participants then responded to the following questions for *each* subsequent risk. Participants were told to think about the specific subsequent risk (financial, health/safety, recreational, ethical, or social) and then were asked the following questions in randomized order. The subsequent risk that was referred to first, second, third, etc. was randomized and counterbalanced across participants.

(Knowledge) To what extent are the risks of this activity known precisely by the people who participate in the activity?

Risk level known precisely						Risk level not known
1	2	3	4	5	6	7
○	○	○	○	○	○	○

(Control) If you participate in this risk, to what extent can you, by personal skill or diligence, avoid negative outcomes?

Personal risk can't be controlled						Personal risk can be controlled
1	2	3	4	5	6	7
○	○	○	○	○	○	○

(Familiarity) Does this risk feel new and novel or old and familiar?

New						Old
1	2	3	4	5	6	7
○	○	○	○	○	○	○

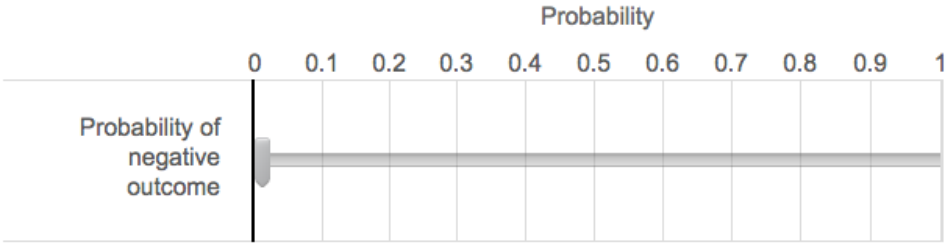
(Dread) Is this a risk that people have learned to live with and can think about reasonably calmly, or is it one that people have great dread for – on the level of a gut reaction?

Common						Dread
1	2	3	4	5	6	7
○	○	○	○	○	○	○

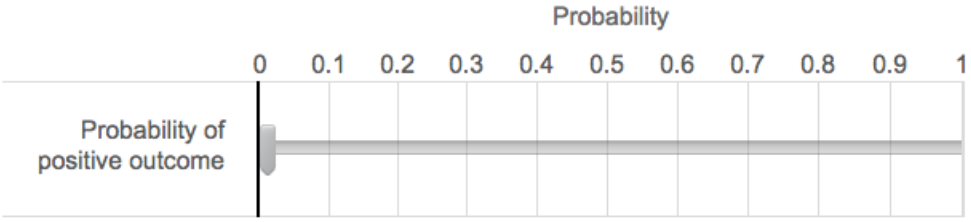
(Severity) When the risk from the activity is realized in the form of a mishap or injury, how likely is it that the consequence will be fatal?

Certain not to be fatal						Certain to be fatal
1	2	3	4	5	6	7
○	○	○	○	○	○	○

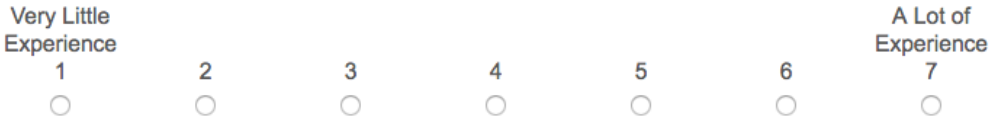
(Probability of Negative Outcome) What is the probability that participating in this activity will result in a negative outcome?



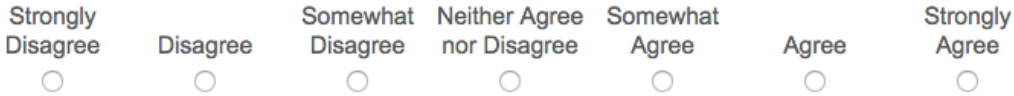
(Probability of Positive Outcome) What is the probability that participating in this activity will result in a positive outcome?



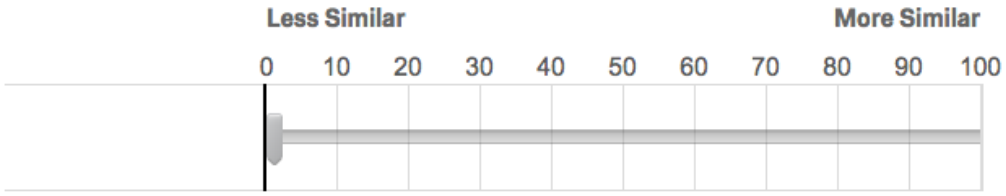
(Experience) How much experience do you have related to this activity?



(Self-Perception) I'm the type of person who likes taking risks of this type.



(Similarity) Using a scale from 0 (Completely Different) to 100 (Identical - No Difference), how similar is the risk you wrote about to [specified subsequent risk]? If you think that the two activities are not at all alike, you should rate them closer to 0, whereas, if you think the two activities are very similar, you should rate them closer to 100. Where items fall in the range between 0 and 100 is your determination.



At the end of the survey, all participants were asked to self-report their age (in years) and gender (Male, Female).

STUDY 3A

Participants were randomly assigned to one of two experience conditions (High Experience, Low Experience). Participants were further randomly assigned to one of five risk domains (Gambling, Ethical, Health/Safety, Social, or Recreational). All participants saw the following instructions:

> We are trying to understand how often people engage in different activities. Please think about the type of activity being described when responding.

Participants in both conditions were told about risks from the domains they were assigned to, and then were asked to list times they had taken risks of that type in the past. The number of times they were asked to write about (1 vs. 8) varied by familiarity condition (participants in the Low Experience condition were asked to write about one time they took such a risk, while participants in the High Experience condition were asked to write about eight times they took such a risk). The writing prompts for each domain are shown below, with the familiarity manipulation specified in brackets.

> [Financial] A financial risk is defined as any risk that involves the chance of financial gain or loss. Some examples of financial risks include: gambling money at a casino, betting at a high-stakes poker game, investing in the stock market, or starting a new business venture. Please think of [1 time, 8 times] you have taken a financial risk and list it below.

> [Health/Safety] A health/safety risk is defined as any risk that involves a chance of physical harm or benefit. Some examples of health/safety risks include: drinking heavily at a social function, engaging in unprotected sex, sunbathing without sunscreen, and not wearing a helmet while riding a bicycle. Please think of [1 time, 8 times] you have taken a health/safety risk and list them below.

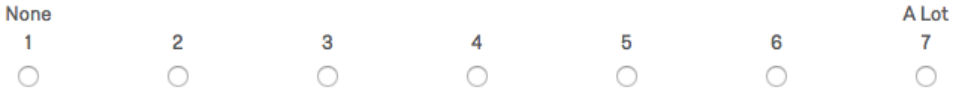
[Ethical] An ethical risk is defined as any risk that has a chance of a moral violation or moral benefit. Some examples of ethical risks include: taking questionable deductions on your income tax return, revealing a friend's secret to someone else, not returning a wallet you found that contains money, and illegally downloading content online. Please think of [1 time, 8 times] you have taken an ethical risk and list them below.

[Social] A social risk is defined as any risk that has a chance of benefit or harm to your interpersonal relationships. Some examples of social risks include: wearing provocative or unusual clothing, disagreeing with an authority figure, moving far away from your family, or admitting your tastes are different from those of your friends. Please think of [1 time, 8 times] you have taken a social risk and list them below.

[Recreational] A recreational risk is defined as any risk that involves a chance of gaining a unique experience/having an adrenaline rush or sustaining bodily injury. Some examples of recreational risks include: snowboarding, skydiving, backpacking in the remote wilderness, and whitewater rafting. Please think of [1 time, 8 times] you have taken a recreational risk and list them below.

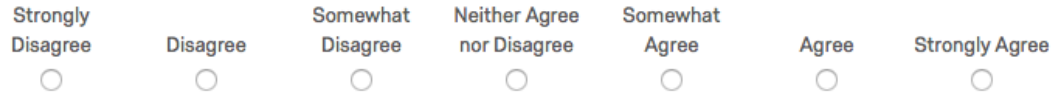
All participants, regardless of experience condition assignment, were asked the following questions. The risk type that participants were asked about was the same as the risk they were randomly assigned to (and are shown in brackets). The order of the following questions was randomized and counterbalanced across participants:

How much experience do you believe you have when it comes to [gambling, recreational, ethical, social, health/safety] risks?

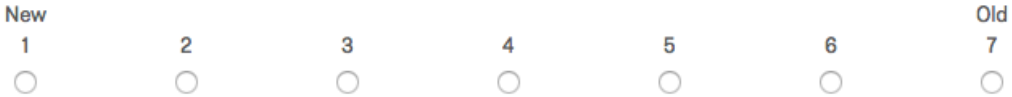


How much do you agree with the following statement?

"I'm the type of person who likes taking [gambling, recreational, ethical, social, health/safety] risks."



Are [gambling, recreational, ethical, social, health/safety] risks something that are new and novel or old and familiar to you?



All participants were then shown the following instructions and asked the following questions about risk-taking likelihood and risk perception. The order of the likelihood and risk perception questions was randomized and counterbalanced across participants. The domain of the risk is shown in parentheses, but this information was not shown to participants.

We are now trying to understand whether or not you would engage in a particular activity. Please rate the likelihood with which you would participate in each of the specified activities.

1. How likely would you be to buy a lottery ticket? (financial)

Very Unlikely	Unlikely	Somewhat Unlikely	Undecided	Somewhat Likely	Likely	Very Likely
○	○	○	○	○	○	○

2. How likely would you be to ride in a car without wearing a seatbelt? (health/safety)

Very Unlikely	Unlikely	Somewhat Unlikely	Undecided	Somewhat Likely	Likely	Very Likely
○	○	○	○	○	○	○

3. How likely would you be to go scuba diving in the ocean? (recreational)

Very Unlikely	Unlikely	Somewhat Unlikely	Undecided	Somewhat Likely	Likely	Very Likely
○	○	○	○	○	○	○

4. How likely would you be to take credit for work that is not your own? (ethical)

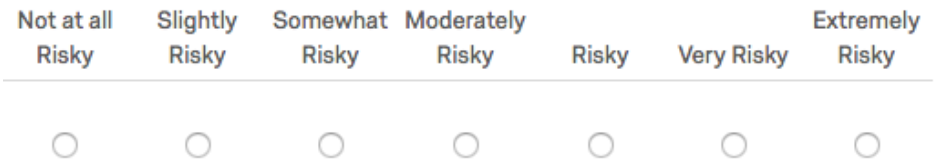
Very Unlikely	Unlikely	Somewhat Unlikely	Undecided	Somewhat Likely	Likely	Very Likely
○	○	○	○	○	○	○

5. How likely would you be to admit that your tastes are different from those of a friend? (social)

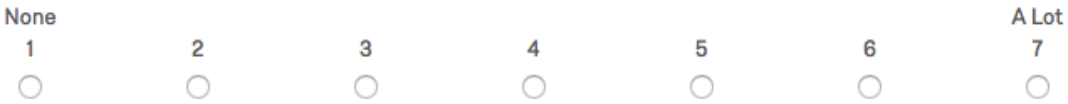
Very Unlikely	Unlikely	Somewhat Unlikely	Undecided	Somewhat Likely	Likely	Very Likely
○	○	○	○	○	○	○

All participants then rated perceived risk, experience, and familiarity for the subsequent risks using the instructions and scales below:

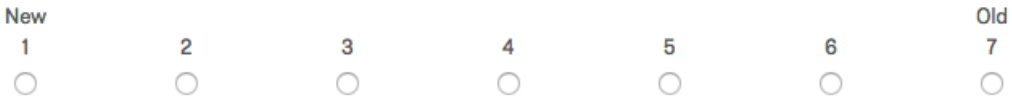
People often see some risk in situations that contain uncertainty about what the outcome or consequences will be and for which there is the possibility of negative consequences. However, riskiness is a very personal and intuitive notion, and we are interested in your gut-level assessment of how risky each activity or behavior is. For each of the following statements, please indicate how risky you perceive each activity to be were you to participate in it.



For each activity below, please indicate how much experience you believe you have.



For each activity below, please indicate whether it is an activity that feels new and novel or old and familiar to you.



Participants were then asked to rate similarity between that risk type and the risks asked about in the likelihood questions. These questions varied by risk domain and are shown below (with risk domain reference specified in brackets).

Please think about the following activity when answering the next questions:

[Financial] Gambling risks (i.e., any risk that involves the chance of financial gain or loss)

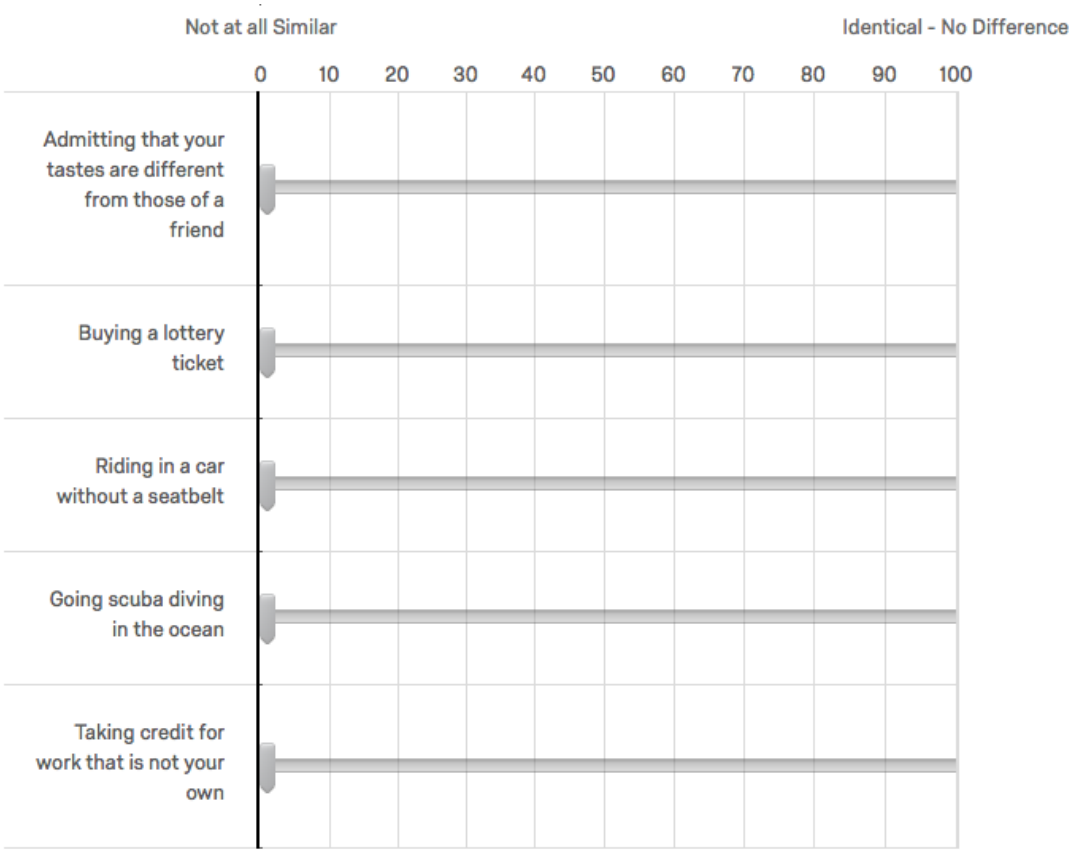
[Social] Social risks (i.e., any risk that has a chance of benefit or hard to your interpersonal relationships)

[Ethical] Ethical risks (i.e., any risk that has a chance of a moral violation or moral benefit)

[Recreational] Recreational risks (i.e., any risk that involves a chance of gaining a unique experience/having an adrenaline rush or sustaining bodily injury)

[Health/Safety] Health/safety risks (i.e., any risk that involves the chance of physical harm or benefit)

How similar are [gambling, social, ethical, recreational, health/safety] risks to each of the following activities?



Please answer the following questions about yourself. None of your responses will be identified directly with you or shared with anyone else.

What gender do you identify with?

- ○ Male
- ○ Female
- ○ Rather not say

How old are you (in years)?

STUDY 3B

Participants were randomly assigned to one of five prior risk domains (ethical, financial, health/safety, recreational, or social). They were then further randomly assigned to one of two self-signaling conditions (Self-Signal: Positive, Self-Signal: Negative). Participants in the Self-Signal: Positive conditions were asked to write about a time they took a risk in the assigned prior risk domain; participants in the Self-Signal: Negative conditions were asked to write about a time they chose not to take a risk in the assigned prior risk domain. The instructions for the conditions are shown below:

Self-Signal: Positive

[Financial] **A financial risk is defined as any risk that involves financial gain or loss.** Some examples of financial risks include: gambling money at a casino, betting at the horse races, and playing a high-stakes poker game.

Now, **think back to a time when you took a financial risk**. In other words, think about a time you had the opportunity to take a financial risk and you chose to take it. Try to think of the most recent experience possible.

Please describe, in about a paragraph, what the experience of taking this financial risk was like for you. Write your paragraph as if describing to someone what you went through, how you felt during the experience and what you thought about. Please be as specific as possible.

[Ethical] **An ethical risk is defined as any risk that involves immoral/moral or unethical/ethical behavior**. Some examples of ethical risks include: taking questionable deductions on your income tax return, revealing a friend's secret to someone else, and not returning a wallet you found that contains money.

Now, **think back to a time when you took an ethical risk**. In other words, think about a time you had the opportunity to take an ethical risk and you chose to take it. Try to think of the most recent experience possible.

Please describe, in about a paragraph, what the experience of taking this ethical risk was like for you. Write your paragraph as if describing to someone what you went through, how you felt during the experience and what you thought about. Please be as specific as possible.

[Health/Safety] **A health/safety risk is defined as any risk that involves your physical health or puts you in a potentially unsafe situation**. Some examples of health/safety risks include: drinking heavily at a social function, engaging in unprotected sex, sunbathing without sunscreen, and walking home alone at night in an unsafe area of town.

Now, **think back to a time when you took a health/safety risk**. In other words, think about a time you had the opportunity to take a health/safety risk and you chose to take it. Try to think of the most recent experience possible.

Please describe, in about a paragraph, what the experience of taking this health/safety risk was like for you. Write your paragraph as if describing to someone what you went through, how you felt during the experience and what you thought about. Please be as specific as possible.

[Recreational] **A recreational risk is defined as any risk that involves an adrenaline rush, physical exertion, and unique experiences**. Some examples of recreational risks include: snowboarding, skydiving, and backpacking in the remote wilderness.

Now, **think back to a time when you took a recreational risk**. In other words, think about a time you had the opportunity to take a recreational risk and you chose to take it. Try to think of the most recent experience possible.

Please describe, in about a paragraph, what the experience of taking this recreational risk was like for you. Write your paragraph as if describing to someone what you went through, how you felt during the experience and what you thought about. Please be as specific as possible.

[Social] **A social risk is defined as any risk that involves your relationships with friends, family, co-workers, or authority figures**. Some examples of social risks include: wearing provocative or unusual clothing, disagreeing with an authority figure, and moving far away from your family.

Now, **think back to a time when you took a social risk**. In other words, think about a time you had the opportunity to take a social risk and you chose to take it. Try to think of the most recent experience possible.

Please describe, in about a paragraph, what the experience of taking this social risk was like for you. Write your paragraph as if describing to someone what you went through, how you felt during the experience and what you thought about. Please be as specific as possible.

Self-Signal: Negative

[Financial] **A financial risk is defined as any risk that involves financial gain or loss.** Some examples of financial risks include: gambling money at a casino, betting at the horse races, and playing a high-stakes poker game.

Now, **think back to a time when you did not take a financial risk**. In other words, think about a time you had the opportunity to take a financial risk but you chose not to. Try to think of the most recent experience possible.

Please describe, in about a paragraph, what the financial risk was and why you chose not to take this financial risk. Write your paragraph as if describing to someone what you went through, how you felt, and what you thought about. Please be as specific as possible.

[Ethical] **An ethical risk is defined as any risk that involves immoral/moral or unethical/ethical behavior.** Some examples of ethical risks include: taking questionable deductions on your income tax return, revealing a friend's secret to someone else, and not returning a wallet you found that contains money.

Now, **think back to a time when you did not take an ethical risk**. In other words, think about a time you had the opportunity to take an ethical risk but you chose not to. Try to think of the most recent experience possible.

Please describe, in about a paragraph, what the ethical risk was and why you chose not to take this ethical risk. Write your paragraph as if describing to someone what you went through, how you felt, and what you thought about. Please be as specific as possible.

[Health/Safety] **A health/safety risk is defined as any risk that involves your physical health or puts you in a potentially unsafe situation.** Some examples of health/safety risks include: drinking heavily at a social function, engaging in unprotected sex, sunbathing without sunscreen, and walking home alone at night in an unsafe area of town.

Now, **think back to a time when you did not take a health/safety risk**. In other words, think about a time you had the opportunity to take a health/safety risk but you chose not to. Try to think of the most recent experience possible.

Please describe, in about a paragraph, what the health/safety risk was and why you chose not to take this health/safety risk. Write your paragraph as if describing to someone what you went through, how you felt, and what you thought about. Please be as specific as possible.

[Recreational] **A recreational risk is defined as any risk that involves an adrenaline rush, physical exertion, and unique experiences**. Some examples of recreational risks include: snowboarding, skydiving, and backpacking in the remote wilderness.

Now, **think back to a time when you did not take a recreational risk**. In other words, think about a time you had the opportunity to take a recreational risk but you chose not to. Try to think of the most recent experience possible.

Please describe, in about a paragraph, what the recreational risk was and why you chose not to take this recreational risk. Write your paragraph as if describing to someone what you went through, how you felt, and what you thought about. Please be as specific as possible.

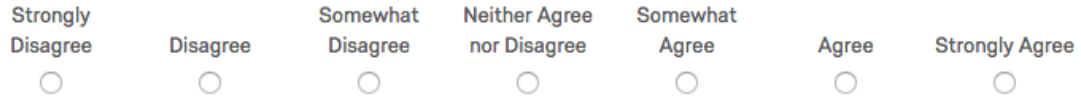
[Social] **A social risk is defined as any risk that involves your relationships with friends,** family, co-workers, or authority figures. Some examples of social risks include: wearing provocative or unusual clothing, disagreeing with an authority figure, and moving far away from your family.

Now, think back to a time when you did not take a social risk. In other words, think about a time you had the opportunity to take a social risk but you chose not to. Try to think of the most recent experience possible.

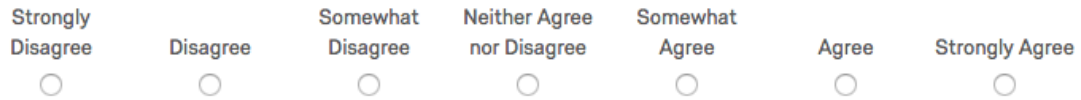
Please describe, in about a paragraph, what the social risk was and why you chose not to take this social risk. Write your paragraph as if describing to someone what you went through, how you felt, and what you thought about. Please be as specific as possible.

Following the writing task, all participants were asked the following questions:

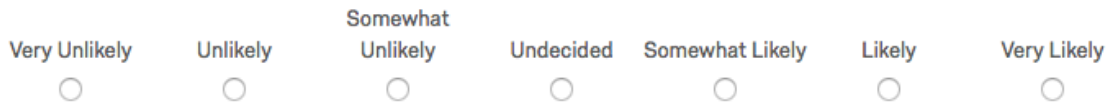
How much do you agree with the following statements:
"I'm the type of person who likes taking [prior risk domain] risks."



"I enjoy taking [prior risk domain] risks."



All participants were then asked how likely they would be to take each of five subsequent risks using the scale below. Risk domain is specified in parentheses. The order of these questions was randomized and counterbalanced across participants.



Suppose you want to invest some of your money in the stock market. Would you invest 5% of your annual income in a very speculative stock? (Financial)

Suppose that you want to go bike riding around a new area of town. You rent a bike from a bike sharing location, which does not have helmets. Would you ride a bicycle without wearing a helmet? (Health/Safety)

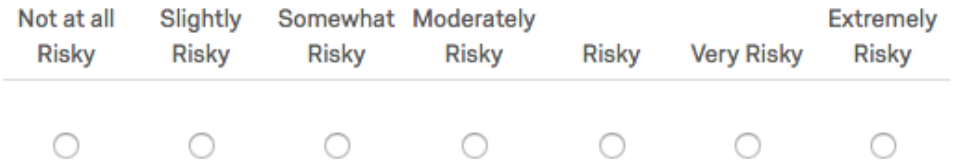
Suppose that your friend is going white water rafting. They invite you to come along. Would you go white water rafting at high water in the spring? (Recreational)

Suppose that you are shopping in a local drugstore. Would you shoplift a small item (e.g., pen, lipstick) from the store? (Ethical)

Suppose that you are at lunch with some of your co-workers. One of your co-workers brings up an issue that you believe in but none of your co-workers do. Would you defend an unpopular issue that you believe in to your co-workers? (Social)

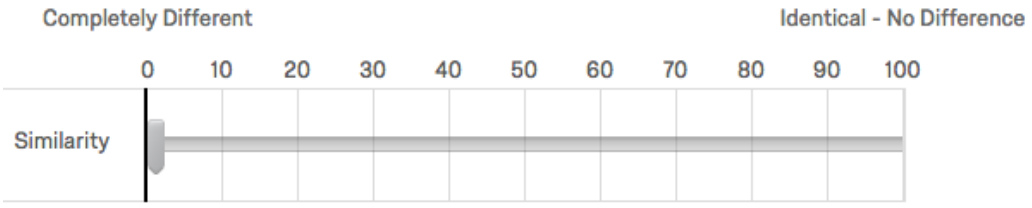
All participants were then asked to rate perceived risk for each of the subsequent risks. The order of these questions was randomized and counterbalanced across participants. Participants responded using the instructions and scale below:

> People often see some risk in situations that contain uncertainty about what the outcome or consequences will be and for which there is the possibility of negative consequences. However, riskiness is a very personal and intuitive notion, and we are interested in your gut level assessment of how risky each situation or behavior is.
> For each of the following statements, please indicate how risky you perceive each situation to be were you to participate in the stated activity. *Provide a rating from Not at all Risky to Extremely Risky by selecting your response under each activity.*



All participants were also asked to rate the similarity between the risk they took (Self-Signal: Positive) or the risk they didn't take (Self-Signal: Negative) and each of the subsequent risks using the instructions and scale below:

> Using a scale from 0 (Completely Different) to 100 (Identical - No Difference), **how similar is [the risk you wrote about taking/the risk you wrote about not taking]** to each of the risky activities listed below?
> If you think that the two activities are not at all alike, you should rate them closer to 0, whereas, if you think the two activities are very similar, you should rate them closer to 100. Where items fall in the range between 0 and 100 is your determination.



Finally, all participants were asked to provide demographic information.

Which gender do you identify with? (Male, Female, Rather not say)

How old are you? (in years)

STUDY 4

Participants were randomly assigned to one of five risk domains (Financial, Recreational, Ethical, Health/Safety, Social) and one of two outcome types (Positive, Negative). Prompts for each domain are shown below, the outcome type manipulation is shown in parentheses.

> [Financial] A financial risk is defined as any risk that involves financial gain or loss. Some examples of financial risks include: gambling money at a casino, betting at the horse races, and playing a high-stakes poker game. Now, think back to a time when you took a financial risk in your life and something (bad, good) happened as a result. In other words, think about a time you took a financial risk and received a (negative, positive) outcome. Try to think of the most recent experience possible. Please describe, in about a paragraph, what the experience of taking this financial risk and receiving a (bad, good) outcome was like for you. Write your paragraph as if describing to someone what you went through, how you felt during the experience and what you thought about. Please be as specific as possible.
>
> [Ethical] An ethical risk is defined as any risk that involves immoral/moral or unethical/ethical behavior. Some examples of ethical risks include: taking questionable deductions on your income tax return, revealing a friend's secret to someone else, and not returning a wallet you found that contains money. Now, think back to a time when you took an ethical risk in your life and something (bad, good) happened. In other words, think about a time you took an ethical risk and received a (negative, positive) outcome. Try to think of the most recent experience possible. Please describe, in about a paragraph, what the experience of taking this ethical risk and receiving a (bad, good) outcome was like for you. Write your paragraph as if describing to someone what you went through, how you felt during the experience and what you thought about. Please be as specific as possible.
>
> [Health/Safety] A health/safety risk is defined as any risk that involves your physical health or puts you in a potentially unsafe situation. Some examples of health/safety risks include: drinking heavily at a social function, engaging in unprotected sex, sunbathing without sunscreen, and walking home alone at night in an unsafe area of town. Now, think back to a time when you took a health/safety risk in your life and something (bad, good) happened. In other words, think about a time you took a health/safety risk and you received a (negative, positive) outcome. Try to think of the most recent experience possible. Please describe, in about a paragraph, what the experience of taking this health/safety risk and receiving a (bad, good) outcome was like for you. Write your paragraph as if describing to someone what you went through, how you felt during the experience and what you thought about. Please be as specific as possible.

[Recreational] A recreational risk is defined as any risk that involves an adrenaline rush, physical exertion, and unique experiences. Some examples of recreational risks include: snowboarding, skydiving, and backpacking in the remote wilderness. Now, think back to a time when you took a recreational risk in your life and something (bad, good) happened. In other words, think about a time you took a recreational risk and you received a (negative, positive) outcome. Try to think of the most recent experience possible. Please describe, in about a paragraph, what the experience of taking this recreational risk and receiving a (bad, good) outcome was like for you. Write your paragraph as if describing to someone what you went through, how you felt during the experience and what you thought about. Please be as specific as possible.

[Social] A social risk is defined as any risk that involves your relationships with friends, family, co-workers, or authority figures. Some examples of social risks include: wearing provocative or unusual clothing, disagreeing with an authority figure, and moving far away from your family. Now, think back to a time when you took a social risk in your life and something (bad, good) happened. In other words, think about a time you took a social risk and you received a (negative, positive) outcome. Try to think of the most recent experience possible. Please describe, in about a paragraph, what the experience of taking this social risk and receiving a (bad, good) outcome was like for you. Write your paragraph as if describing to someone what you went through, how you felt during the experience and what you thought about. Please be as specific as possible.

All participants saw the following questions (across conditions). Risk domains are shown in parentheses, but this information was not shown to participants.

[Risk Likelihood] The order of all likelihood questions was randomized across participants.

Suppose that you and a friend are at a sporting event and one of your friends asks if you want to make a bet on the outcome of the event. Would you bet a day's income on the outcome of a sporting event? (Financial)

Very Unlikely	Unlikely	Somewhat Unlikely	Undecided	Somewhat Likely	Likely	Very Likely
○	○	○	○	○	○	○

Suppose that your friend picks you up to a go to a movie. When they arrive, they tell you that the passenger-side seatbelt in their car isn't working. Would you ride in their car without wearing a seatbelt while being a passenger in the front seat? (Health/Safety)

Very Unlikely	Unlikely	Somewhat Unlikely	Undecided	Somewhat Likely	Likely	Very Likely
○	○	○	○	○	○	○

Suppose that your friend is going bungee jumping off of a tall bridge over a river. They invite you to come along. Would you go bungee jumping? (Recreational)

Very Unlikely	Unlikely	Somewhat Unlikely	Undecided	Somewhat Likely	Likely	Very Likely
○	○	○	○	○	○	○

Suppose that your boss called you into their office. You had just given a presentation and they wanted to give you feedback. They said the presentation went well and they were especially impressed by the graphics. As it turns out, one of your co-workers did the graphics for you as a favor. Your boss is unaware of this. Would you take credit for the graphics that your co-worker did for you? (Ethical)

Very Unlikely	Unlikely	Somewhat Unlikely	Undecided	Somewhat Likely	Likely	Very Likely
○	○	○	○	○	○	○

Suppose that you are at a dinner party with your friends. One of your friends brings up a hot topic in politics. As your other friends join in the discussion, you realize you have different opinions from those of your friends. Would you express your contradictory opinions in front of a group of your friends? (Social)

Very Unlikely	Unlikely	Somewhat Unlikely	Undecided	Somewhat Likely	Likely	Very Likely
○	○	○	○	○	○	○

[Risk Perception] The order of the statements in the table was randomized across participants.

People often see some risk in situations that contain uncertainty about what the outcome or consequences will be and for which there is the possibility of negative consequences. However, riskiness is a very personal and intuitive notion, and we are interested in your gut level assessment of how risky each situation or behavior is. For each of the following statements, please indicate how risky you perceive each situation to be were you to participate in the stated activity. Provide a rating from Not at all Risky to Extremely Risky by selecting your response under each activity.

Not wearing a seatbelt while being a passenger in the front seat of a car. (Health/Safety)

Not at all Risky	Slightly Risky	Somewhat Risky	Moderately Risky	Risky	Very Risky	Extremely Risky
○	○	○	○	○	○	○

Going bungee jumping. (Recreational)

Not at all Risky	Slightly Risky	Somewhat Risky	Moderately Risky	Risky	Very Risky	Extremely Risky
○	○	○	○	○	○	○

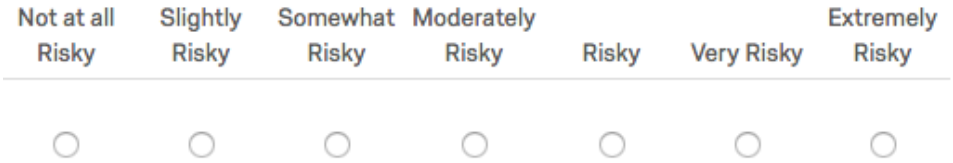
Passing off somebody else's work as your own. (Ethical)

Not at all Risky	Slightly Risky	Somewhat Risky	Moderately Risky	Risky	Very Risky	Extremely Risky
○	○	○	○	○	○	○

Betting a day's income on the outcome of a sporting event. (Financial)

Not at all Risky	Slightly Risky	Somewhat Risky	Moderately Risky	Risky	Very Risky	Extremely Risky
○	○	○	○	○	○	○

Admitting that your opinions are different from those of your friends. (Social)

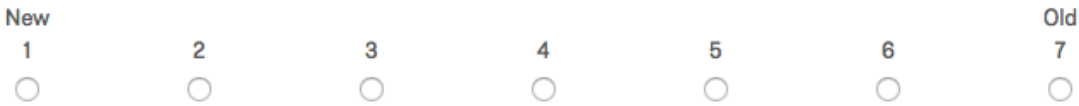


[Follow-up Dimensions for Subsequent Risks] All participants were asked to rate each of the subsequent risks (from the likelihood questions) on the following dimensions. The order of the risk that was being evaluated was randomized across participants. The order of the questions within each risk domain was also randomized across participants. Since only the instructions before the questions varied for the different risks, these are shown in the beginning with the questions following (but participants only evaluated one risk at a time in the survey).

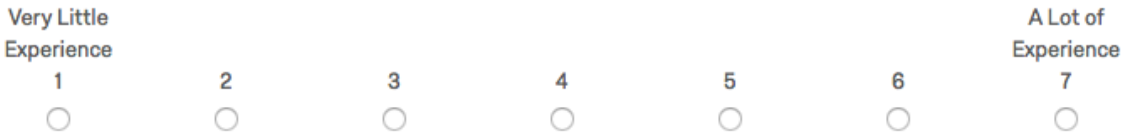
Please think of the following activity when responding to the next questions:

Betting a day's income on the outcome of a sporting event. (Financial)
Going bungee jumping. (Recreational)
Passing off someone else's work as your own. (Ethical)
Not wearing a seatbelt while being a passenger in the front seat of a car. (Health/Safety)
Admitting that your opinions are different from those of your friends. (Social)

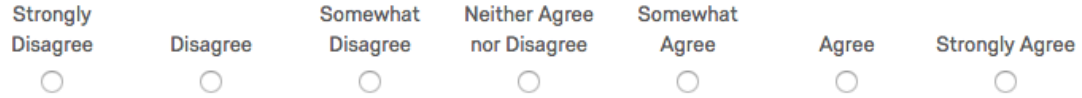
[Familiarity] Does this risk feel new and novel or old and familiar?



[Experience] How much experience do you have related to this activity?



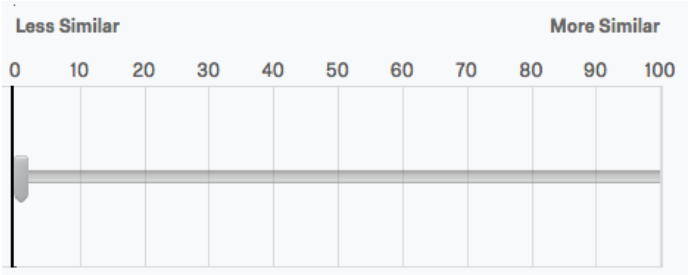
[Self-Perception] I'm the type of person who likes taking risks of this type.



[Similarity] Using a scale from 0 (Completely Different) to 100 (Identical - No Difference), how similar is the risk you wrote about to [risk specified in the instructions]?

If you think that the two activities are not at all alike, you should rate them closer to 0, whereas, if you think the two activities are very similar, you should rate them closer to 100. Where items fall in the range between 0 and 100 is your determination.

[Risk specified in the instructions was listed here]



All participants were asked the following two questions:

What gender do you identify with? (Female, Male, Rather not say)

How old are you (in years)?

STUDY 5

All participants were first presented with instructions informing them that they would have to take a risk as part of the study. All participants were told they would be given a $1 bonus that may have to be used in the risks for the study. They were further told that they could not be given the details of the risks beforehand and that if they were okay with participating under these circumstances, they should indicate such before proceeding. Participants who were not comfortable with proceeding were told they would still receive their baseline compensation ($1), but that they would not receive the additional bonus.

> In the following you will have to engage in a risky behavior. This behavior will involve real risk and real payoffs. As part of the study, we cannot tell you what this risk is beforehand, but we can assure you that the consequences are not life-threatening or financially burdensome. As part of the study procedure, an independent review board (IRB) has determined that, while there is risk entailed, the risk is not so great as to put any participants in a compromising position.
>
> For participating in this study we are giving everyone a $1 bonus (in addition to their baseline compensation of $1). You may need to use this bonus as part of the risks you encounter.
>
> If you are comfortable proceeding with this study given this information, please select "Yes" below. If you are not comfortable with taking this study given this information, please select "No." You will still be approved for this HIT and paid the baseline compensation (but not the bonus), so selecting "No" will not affect your standing on mTurk.
>
> ○ Yes
>
> ○ No

Participants who said they were okay with proceeding were then randomly assigned to one of two prior risk domain conditions: Financial or Social. Participants in the Financial condition had to take financial risk, while participants in the Social condition had to take a social risk.

Instructions for the Financial condition were:

Welcome to the financial game!

To play this game, you will have to bet $0.50 of your $1 bonus. The computer will then randomly draw a number between 1 and 100. If that number is greater than or equal to 51, you will win $1 (the $0.50 you bet + $0.50 additional). If that number is less than or equal to 50, you will lose the $0.50 you bet.

Participants were asked three questions to ensure they were paying attention and understood the risk. Participants were only allowed to proceed after answering all of these questions correctly.

To ensure you understand the game we are going to ask you a few questions.
How much do you have to pay to play the game?

- ○ $0
- ○ $0.50
- ○ $1
- ○ $1.50
- ○ $2

If the number drawn is 47, do you win or lose?

- ○ Win
- ○ Lose

If the number drawn in 98, do you win or lose?

- ○ Win
- ○ Lose

Participants were also given the option of exiting the survey at this point.

I would like to stop the survey now (selecting this option will end the survey -- you will still get paid the baseline compensation, but you will not receive any bonuses).

- ☐ Exit

Participants who opted out were paid the baseline compensation ($1) but not the bonus.

After responding to the three comprehension questions, participants who did not opt out of the risk were shown the following:

> Okay, let's play!
> Press the ">>" button below to see what your number is!

The survey program was set-up to randomly draw a number between 1 and 100. Participants who received a number less than or equal to 50 lost the $0.50 of their bonus that they had to use to enter to gamble. Participants who received a number greater than or equal to 51 won $1 (the $0.50 they paid to enter the gamble plus and additional $0.50). All participants were shown their randomly drawn number and were told whether they won or lost:

> # You won!
>
> You won an additional $1, you have a $1.50 bonus now!
>
> # You lost.
>
> You lost $0.50, you only have a $0.50 bonus now.

Participants in the Social condition saw the following:

> Welcome to the secret task! In this task you will have to share a secret about yourself. The computer will then randomly draw a number between 1 and 100. If that number is less than or equal to 50, your secret will be posted on Whisper. If that number is greater than or equal to 51, your secret will not be posted.
>
> Whisper is an online community where millions of people around the world share real thoughts anonymously. The postings, called "whispers," consist of text superimposed over an image. Whisper has a total of 17 billion monthly pageviews on its mobile and desktop websites, with 250 million monthly users across 187 countries (an example of Whisper can be found here: http://whisper.sh/).
>
> If your secret is posted, you can access it by searching Whisper (on your desktop or via the mobile app)

As in the Financial condition, participants were asked three questions to ensure they were paying attention and understood the risk. Participants were only allowed to proceed after answer all of the questions correctly.

To ensure you understand the task we are going to ask you a few questions.
Who can see your secret online?

- ○ Anyone who accesses the Whisper website or uses the Whisper app
- ○ No one
- ○ Only people who use the Whisper app

If the number drawn is 47, is your secret posted online?

- ○ Yes
- ○ No

If the number drawn in 98, is your secret posted online?

- ○ Yes
- ○ No

Participants were also given the option of exiting the survey at this point.

I would like to stop the survey now (selecting this option will end the survey -- you will still get paid the baseline compensation, but you will not receive any bonuses).

- ☐ Exit

After responding to the three comprehension questions, participants who did not opt out of the risk were shown the following:

Okay, time to share a secret.

Please write your personal secret below. This secret can be anything about you, your thoughts, or your life. Just be sure not to share any identifying information (name, location, specific financial information, etc.).

The survey program was set-up to randomly draw a number between 1 and 100. Participants who received a number less than or equal to 50, "lost" and had their secret posted on Whisper. Participants who received a number greater than or equal to 51, "won" and did not have their secret posted. All participants were shown their randomly drawn number and were told whether or not their secret would be posted:

Press the ">>" button below to see what your number is!

Your secret will be posted.

Your secret will be searchable on Whisper in the next 12 hours.

Your secret will not be posted.

Your secret will not be posted on Whisper in the next 12 hours.

Participants in both the Financial and Social conditions were then asked to rate their likelihood of taking two subsequent risks (one financial and one social). The elicitation procedure for these questions was set-up to be incentive compatible. In order to ensure participants understood this, they were shown the following instructions:

In the following you will be asked several questions. The first set of questions will be about two different risky activities and how likely you would be to take each of them. **At the end of the survey you may be asked to take one of these actual risks depending on your responses, so please answer these questions as if you are really facing this risk** .

Specifically, after you provide your responses to all of the questions, the computer will randomly draw either the number 1 or the number 2 (with equal likelihood). For the number drawn, we will look at the corresponding question (from the first two questions only) and see whether you indicated that you would take that specific risk. **You will only be asked whether you want to take the actual risk if your response indicates that you are likely to take the risk** (in other words, you selected "Extremely Likely," "Moderately Likely," or "Slightly Likely" on the scale).

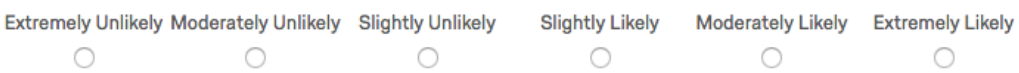
For this reason, it is in your best interest to answer truthfully since you will potentially be asked to take that risk in real life. Please note that your response can have no effect on the risk actually presented to you because the risk will be selected by the computer at random.

Participants were then showed the subsequent risks. Whether the financial or social subsequent risk was chosen in the incentive compatible lottery was randomized and counterbalanced across participants (e.g., the number drawn in the lottery was always 2 and half the participants saw the subsequent risk likelihood question with the financial risks second, while the other half of participants saw the subsequent risk likelihood questions with the social risk second).

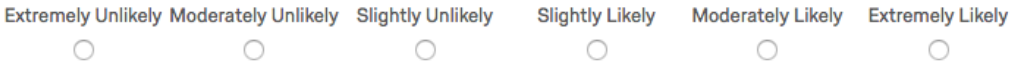
Next you will be shown two activities. For each of the activities, please indicate whether you would engage in the described activity. Please remember to answer as if you were actually going to take the risk.

The two subsequent risks are shown below with domain in parentheses (domain information was not presented to participants):

Would you post something about your personal beliefs on social media? (Social)



Would you take a gamble where you have a 2/3 chance of winning $0.50 and a 1/3 chance of losing $0.50?

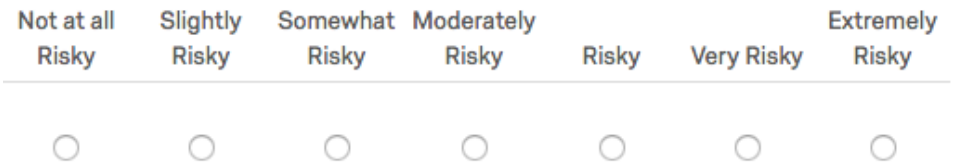


All participants were then asked to rate perceived risk for the subsequent risks. The order of the risks was randomized across participants.

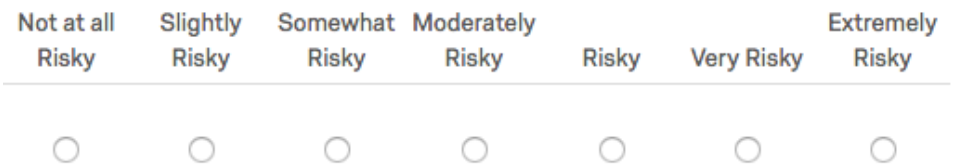
People often see some risk in situations that contain uncertainty about what the outcome or consequences will be and for which there is the possibility of negative consequences. However, riskiness is a very personal and intuitive notion, and we are interested in your gut-level assessment of how risky each situation or behavior is.

Please note that your responses to this section will not factor into the real risk portion of the experiment.

Posting something about your personal beliefs on social media.



Taking a gamble where you have a 2/3 chance of winning $0.50 and a 1/3 chance of losing $0.50.



All participants were then asked to rate the subsequent risks on multiple dimensions. Whether they responded to these questions for the financial or social subsequent risk first was randomized and counterbalanced across participants.

Please think of the following activity when you answer the next questions:

Taking a gamble where you have a 2/3 chance of winning $0.50 and a 1/3 chance of losing $0.50.

Posting something about your personal beliefs on social media.

Does this risk feel new and novel or old and familiar? (Familiarity)

New						Old
1	2	3	4	5	6	7
○	○	○	○	○	○	○

How much experience do you have related to this activity? (Experience)

Very Little Experience						A Lot of Experience
1	2	3	4	5	6	7
○	○	○	○	○	○	○

I'm the type of person who likes taking risks of this type. (Self-Perception)

Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
○	○	○	○	○	○	○

I enjoy taking risks like this. (Enjoyment)

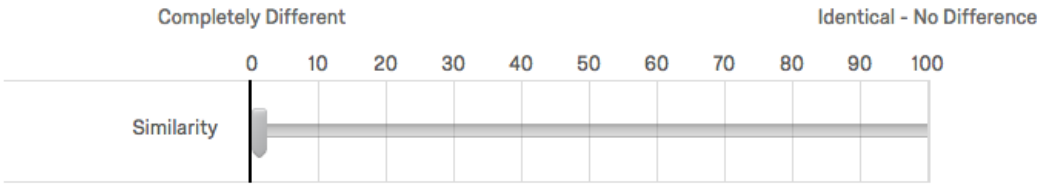
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
○	○	○	○	○	○	○

All participants were then asked to rate the similarity between the prior risk they took and each of the subsequent risks they saw.

For each activity listed below, please judge how similar that activity is to the risk you took in the beginning. You will be judging the similarity between the activities using a continuous scale from "Completely Different" (0) to "Identical - No Difference" (100). If you think that the two activities are not at all alike, you should rate them closer to 0, whereas, if you think the two activities are very similar, you should rate them closer to 100.

Where items fall in the range between 0 and 100 is your determination. Remember, your similarity ratings are based on your own perception and assessment.

The participants responded to the questions using the scale below:



Participants in the Social condition saw the following similarity questions:

How similar is potentially revealing a secret online to posting something about your personal beliefs on social media??

How similar is potentially revealing a secret online to taking a gamble where you have a 2/3 chance of winning $0.50 and a 1/3 chance of losing $0.50?

Participants in the Financial condition saw the following similarity questions:

How similar is the financial game (paying $0.50 to play a gamble that has a 50% chance of winning $1 and a 50% chance of losing the $0.50) to posting something about your personal beliefs on social media?

How similar is the financial game (paying $0.50 to play a gamble that has a 50% chance of winning $1 and a 50% chance of losing the $0.50) to taking a gamble where you have a 2/3 chance of winning $0.50 and a 1/3 chance of losing $0.50?

All participants were asked to provide demographic information:

What gender do you identify with? (Female, Male, Rather not say)

How old are you? (in years)

Finally, participants were taken through the incentive compatible lottery (to determine whether or not they would actually take one of the subsequent risks).

> We are now going to choose a number at random to determine what risk you will be presented with.
>
> Remember, the computer will randomly choose either 1 or 2 with equal likelihood. Those numbers correspond to the questions asking you whether you would take each of two risks. A number will be drawn, then the risk will be shown to you. If you said you were at all likely to take the risk, you will be shown the risk and asked whether you want to take it. If you said you were at all unlikely to take the risk, you will not be shown the risk.
>
> The random number chosen for you is:
>
> **2**

All participants were shown the number 2, but the question this number corresponded to was randomized and counterbalanced across participants. For participants who saw the subsequent financial risk second, they saw the following:

> The second risk question you responded to was:
>
> *Take a gamble where you have a 2/3 chance of winning $0.50 and a 1/3 chance of losing $0.50.*

Participants were then shown the response they provided for the likelihood question.

> Your response was:
> {Actual response selected by participants displayed here}

Participants who selected “Extremely Unlikely,” “Moderately Likely,” or “Slightly Likely” were taken to the end of the survey. Participants who selected “Extremely Likely,” “Moderately Likely,” or “Slightly Likely” were shown the following:

You **WILL** be shown the risk.

Take a gamble where you have a 2/3 chance of winning $0.50 and a 1/3 chance of losing $0.50.

The computer will randomly select a number between 1 and 6 (like rolling a die). If the numbers 1, 2, 3, or 4 come up, you win and additional $0.50 bonus payment. If the numbers 5 or 6 come up, you will lose $0.50 from your current bonus payment.

Do you want to take this gamble?

- ○ Yes
- ○ No

Participants who selected "No" were taken to the end of the survey. Participants who selected "Yes" were shown the following:

Press the ">>" button to see what your randomly drawn number is!

The survey was programmed to randomly select, with equal likelihood, a number between 1 and 6. If that number was 1, 2, 3, or 4, participants won an additional $0.50 bonus payment. If that number was 5 or 6, participants lost $0.50 from their remaining bonus payment. Participants were shown their randomly drawn number and told whether they won or lost:

You win $0.50!

This will be added to your bonus for the survey!

You lost $0.50.

This amount will be subtracted from your bonus payment for the survey.

Participants were then taken to the end of the survey.

For participants who saw the subsequent social risk second, they saw the following:

> The second risk question you responded to was:
> *Post something about your personal beliefs on social media.*

Participants were then shown the response they provided for the likelihood question.

> Your response was:
> {Actual response selected by participants displayed here}

Participants who selected "Extremely Unlikely," "Moderately Likely," or "Slightly Likely" were taken to the end of the survey. Participants who selected "Extremely Likely," "Moderately Likely," or "Slightly Likely" were shown the following:

> You **WILL** be shown the risk.
>
> Post something about your personal beliefs on social media.
>
> You must post something about your personal beliefs on your personal social media site (e.g., on your Facebook timeline, a tweet on Twitter, or a post on Instagram). This post must not be private. This post can be about anything you believe in (e.g., about a political issue, about something you like or don't like, etc.).
>
> Do you want to post something about your personal beliefs on social media?
>
> ○ Yes
> ○ No

Participants who selected "No" were taken to the end of the survey. Participants who selected "Yes" were shown the following:

As a reminder, here are the instructions:

> You must post something about your personal beliefs on your personal social media site (e.g., on your Facebook timeline, a tweet on Twitter, or a post on Instagram). This post must not be private. This post can be about anything you believe in (e.g., about a political issue, about something you like or don't like, etc.).
>
> **After you have posted**, please take a screenshot of the post and upload that screenshot using the upload button below. When you take the screenshot, please make sure that your name, location, or any other identifying information is not shown (you need only to show the text of the post).
>
> (If you do not have any social media presence, please send a note to the researcher explaining this).
>
> To take a screenshot on a Mac, press Shift + Command + 4 and then select what you want to take a picture of using your mouse. To take a screenshot on a PC, press Alt + PrtScn (Print Screen) and then paste that in Word or another program and edit. Alternatively, on a PC you can also use the Snipping Tool (Start --> All Programs --> Accessories --> Snipping Tool).

Participants were then taken to the end of the survey.

At the end of the survey, all participants were shown a debriefing form explaining the study to them. This form also informed participants that if they were in the Social condition, no secrets were actually posted on Whisper. They were told that deception was used in order to keep the risk minimal. The text from the debriefing form is replicated below:

Thank you for your participation. This study investigates how people contemplate risk and make decisions regarding risky choices. We are trying to understand how preceding choices and behavior affect current risk-taking levels. This is why we asked you to participate in a risky activity and why we asked several questions about various risky behaviors and risk likelihood, and why we had some participants make choices over another risky prospect.

All participants in this experiment were 18 years of age or older and were randomly placed in a Financial or Social condition. In the Financial condition, participants took a gamble with part of their $1 bonus. The gamble had a 50% chance of winning $1 and a 50% chance of losing $0.50. Participants who won received a $1.50 bonus, participants who lost received a $0.50 bonus. In the Social condition, participants shared a personal secret with the researcher. There was a 50% chance this secret would be posted by the researcher on a website called Whisper (an online website where people can anonymously share secrets), and a 50% chance the secret would not be revealed. If the secret was chosen to be revealed, participants were told it would posted on Whisper within 12 hours. We would like participants in the Social condition to know that the secrets they shared were not actually posted on any website. No individual secrets will ever be revealed or seen by anyone other than the researcher. We told participants in the Social condition that their secret may be posted (and we told 50% of those participants their secret would for sure be posted) in order to simulate taking an actual social risk. However, we are not actually posting the secrets online in order to keep the risk to participants minimal.

After the prior risk experience, all participants stated whether or not they would take two different risks as well as provide responses to several questions about those risks. Participants were then randomly asked to take one of the two risks based on their response to whether or not they would take one: participants who said they would be likely to take the risk in the randomly drawn domain were then asked to take the risk in real life. Participants who said they would be unlikely to take the risk were not exposed to the real risk. The real risks were financial and social.

Finally, all participants were shown their total bonus payment (if any). Bonus compensation ranged from $0 - $2, meaning total compensation ranged from $1 - $3.