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(Almost) No Evidence of Self–Other Differences in Risk Preferences and Cognitive Processing Among Professionals in Contextualized Risky-Choice Framing Tasks

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Supplementary Materials: Code, Data, Materials, Preregistration [see Index of Supplementary Materials]

Abstract

A substantial body of research has shown that risky decisions made for others often differ from those made for oneself. However, findings remain mixed, and there is still ongoing discussion about when and for whom self-other differences are most likely to emerge or be strongest. Building on previous research, which has primarily focused on lay samples and the outcomes of decision-making rather than the underlying processes, the current study reports on four preregistered experiments examining self–other differences across various professional domains, while also testing the commonly assumed cognitive mechanisms. Participants (total N = 1,337) were financial advisors at a large trade union (Experiment 1), leaders at a local government organization (Experiment 2) and a large hospital (Experiment 3), and a general sample of employees and leaders (Experiment 4). Participants completed a risky choice problem tailored to reflect their professional background (Experiments 1–3), where they were asked to choose between a safe and risky option either for themselves or for a hypothetical other, in both gain and loss frames. They then reported the extent to which they engaged in intuitive and analytical processing, and their emotional arousal. There was no evidence for consistent self-other differences in risk and no moderation by frame. In addition, there were no self-other differences in cognitive processing or affect. However, there was a main effect of framing in all experiments—that is, greater risk-seeking in loss (vs. gain) frames.

Keywords

self-other, risk, intuition, analysis, decision-making

Highlights

- Prior research suggests that making risky decisions for others, rather than oneself, can reduce emotional biases such as loss aversion.
- This study tested whether such self–other differences appear among professional decision-makers in hypothetical risky-choice tasks.
- Results showed very weak evidence for self–other differences in risk preferences, cognitive processing, or emotions, with similar patterns among non-professionals.
- These findings highlight the need for well-powered replications to test the robustness and boundary conditions of self–other effects in risky decision-making.

Moving beyond the traditional emphasis on how individuals make decisions for themselves, a growing line of research has focused on how risk preferences change when people decide for others (Polman & Wu, 2020). This more recent and ongoing line of research has provided important insight into the role of social context in risky decision-making and has helped bring research closer to the way decisions are made in everyday life, where people often make choices on behalf of others.[1] Studies find that risk preferences shift or neutralize when people are asked to decide for someone else rather than themselves, such as a stranger (Ziegler & Tunney, 2012), a friend (Beisswanger et al., 2003; Stone & Allgaier, 2008; Stone et al., 2013; Wray & Stone, 2005), a colleague (Garcia-Retamero et al., 2015), or a client (Roszkowski & Snelbecker, 1990).

Notably, deciding for others has been found to attenuate and sometimes eliminate loss aversion (Andersson et al., 2014; Polman, 2012; Raue et al., 2015; Sun et al., 2017, 2021; Zhang et al., 2017). Loss aversion, a central idea in Prospect Theory (Kahneman & Tversky, 1979) (Kahneman & Tversky, 1979), describes how people tend to react more strongly to potential losses than to equivalent gains. As a result, they often become more willing to take risks when outcomes are framed as losses but are more cautious when the same outcomes are framed as gains. It is one of the most robust and widely applied phenomena in the behavioral sciences (Bazerman, 1984; Teigen, 2015; Tversky & Kahneman, 1981). Such findings are both theoretically and practically important because,

1) While description-based risky choice problems, such as the famous Unusual Disease Problem (Tversky & Kahneman, 1981), often involve outcomes for others, early research typically did not vary the choice recipient (i.e., whom the decision was made for).

in principle, they suggest that simply imagining deciding for someone else can change how people perceive risks and reduce susceptibility to well-known cognitive biases like loss aversion.

These self-other differences are often interpreted through dual-process models of risky decision-making, such as the risk-as-feelings vs. risk-as-analysis framework (Loewenstein et al., 2001; Slovic et al., 2004). According to this framework, although emotional reactions—such as the fear triggered by imagining potential losses—often guide risky decisions, deciding on behalf of others is thought to weaken these emotional responses and promote a shift from risk-as-feelings to risk-as-analysis. One reason for this shift may be the greater psychological distance people experience when deciding for others—specifically, greater social distance, which according to Construal Level Theory is a core dimension of psychological distance—giving them a cooler and more detached perspective on the situation (Trope & Liberman, 2010). Much like when reasoning about other people's problems, decisions for others can feel less emotionally charged and easier to approach objectively (Grossmann & Kross, 2014).

However, recent meta-analyses indicate that self–other differences in risky decision-making are, on average, absent or very small, and vary considerably across domains and decision contexts (Batteux et al., 2019; Polman & Wu, 2020). These findings highlight the importance of examining self–other differences in more diverse decision contexts and populations, where such effects may be more pronounced or take different forms.

So far, very little research has focused on the professional domain. Prior work has largely focused on laypeople and student samples, thus limiting our understanding of how self-other differences might emerge among experienced decision-makers who regularly make decisions for others. This study examines self–other differences in risky decision-making among experienced professionals—specifically leaders, financial advisors, and employees—using decision problems modeled on classic risky choice framing tasks, but tailored to reflect their organizational roles and work contexts. It also tests the commonly assumed cognitive processes underlying these differences.

Professionals may show stronger self–other differences in decision-making precisely because their roles require making decisions on behalf of others. Formal training, organizational norms, and role expectations often emphasize caution, responsibility, and deliberation—especially when decisions affect others (Stone et al., 2013). Professionals may be more aware of the potential errors they could commit when making choices for others, making them more cautious. Furthermore, according to accountability theory (Tetlock, 1985), individuals who expect to justify their decisions to others often show greater resistance to common biases.

Although numerous studies have documented self–other differences in risky choices, less attention has been paid to the underlying cognitive processes, as proposed by theories like the risk-as-feelings vs. risk-as-analysis model (Slovic et al., 2004; Slovic & Peters, 2006). It is commonly assumed, whether implicitly or explicitly, that decisions for oneself are characterized by higher emotional arousal and intuitive processing (risk-as-feelings), and that decisions for others are characterized by less affective and more analytical processing (risk-as-analysis).

Indeed, some studies have found that risky decisions for others reduce subjective emotional arousal (Zhang et al., 2017, 2019). This has implications for risky decision-making because decision biases like framing effects are assumed to be driven by intuitive processing (e.g., Guo et al., 2017). Loss frames, for instance, increase arousal (Sokol-Hessner et al., 2009), which can override more analytical, deliberative thinking. Although intuition can also involve rapid and adaptive pattern recognition, as seen by experts, it is the affective aspect of intuition that underpins influential theories such as the risk-as-feelings hypothesis (Loewenstein et al., 2001). Given that affect, especially arousal, relates to more intuitive processing (Damasio, 1996; Dane & Pratt, 2007; Sinclair et al., 2010), deciding for others should make people rely less on intuition. There is also evidence indicating greater deliberation in decisions for others. Liu et al. (2018) found that, when deciding for others, people looked at more information in scenarios like job options. In contrast, using a lottery task, Barrafrem and Hausfeld (2020) found that people processed more information when deciding for themselves than for someone else. This inconsistency may be due to differences in the nature of the tasks, as mentioned earlier.

So far, very little research has examined self-other differences in the professional domain. Most studies rely on lay samples, such as students, and use lottery-based tasks, which do not represent real-life interpersonal decisions. Some research has focused on more realistic, albeit still hypothetical, interpersonal domains, where participants face decisions about, for instance, health, safety, or personal finances. A meta-analysis by Polman and Wu (2020) found that the self-other distinction is more pronounced in these types of scenarios. Unlike abstract lotteries, these scenarios likely evoke a greater sense of responsibility and accountability (Lu et al., 2018), where decision-makers feel a need to more carefully consider options and minimize negative outcomes for others.

This is an important gap because self-other differences are particularly relevant for practitioners who regularly make high-stake decisions for others (Stone et al., 2013). Studies have demonstrated that professionals—such as financial advisors and public managers—are susceptible to framing effects (Blumenthal-Barby & Krieger, 2015; Fuenzalida et al., 2021; Garcia-Retamero & Dhami, 2013; Reyna et al., 2014). These effects challenge the assumption that professionals are neutral and consistent in their decision-making, and suggest that they might be influenced by subtle, normatively irrelevant factors. It is not so surprising then that some organizations have designed policies against decision-making for socially close others. For instance, the American Medical Association (2023) has implemented regulations that prevent doctors from treating themselves, their close friends, or their family members.

If deciding for others reduces decision biases and increases analytical processing, it would suggest a potentially cheap and effective way of managing decisions at work. Although, perhaps somewhat paradoxically, while professionals might want to strive for “rationality”, recent research finds that people trust decision-makers more and view them as more effective leaders when they display sensitivity to framing effects (Dorison & Heller, 2022). Thus, it is important to know if and how professionals' decision-making processes vary when they decide for others rather than themselves.

Overview of Experiments

Four experiments tested how decision-makers in various professional domains respond to classic risky choice problems tailored to their work context, specifically examining 1) whether they are susceptible to framing effects and if this changes when deciding for others versus themselves, and 2) whether deciding for others shifts their cognitive processing such that they rely less on affect and intuition and more on careful deliberation.

Professionals were recruited from different organizations in Norway: Financial advisors at a large trade union (Experiment 1), and leaders at a local government organization and a large hospital (Experiment 2–3). Experiment 4 uses a large, general sample of employees and leaders from diverse organizations. In Experiments 1–3, participants completed a unique variant of the classic Disease Problem (Tversky & Kahneman, 1981), tailored to their work context. Experiment 1 used a pension investment scenario. Experiments 2 and 3 focused on job layoff scenarios, which were highly relevant due to ongoing layoffs during the COVID-19 pandemic. In Experiment 4, targeting a broader, more diverse sample, the problem was more general and not tied to a specific work context.

In each experiment, participants completed the decision-making problem in both gain and loss frames (randomized order), completed a comprehension check, and subsequently reported their reliance on affective intuitive processing and analytical processing while making their decisions, as well as their level of arousal. Participants also responded to other exploratory items including valence and psychological distance, which are reported in the supplementary file. Finally, participants provided their demographic information and indicated their level of seriousness while completing the study. For an illustration of the experimental design and procedure, se Figure S1 in the supplementary material on the OSF page (see Mayiwar, 2022b). The design, procedure, and measures were identical across all experiments, except the decision-making problem.

Method

Methods were carried out in accordance with local guidelines and regulations set by the Norwegian Agency for Shared Services in Education and Research (SIKT). All participants provided informed consent.

The hypotheses, methods, and analytical plan were preregistered and can be accessed (see Mayiwar, 2022a). Deviations from the preregistration are listed in Table S1 in the supplementary file ("supplementary.docx" in the folder "Supplementary" on the OSF page, see Mayiwar, 2022b). Data, code (RMarkdown files along with knitted HTML documents containing code and resulting output), and materials (Qualtrics files as importable "qsf" files and as Word documents) are available (see Mayiwar, 2022b). All studies, measures, manipulations, and data/participant exclusions are reported in the manuscript.

Sample

Data collection was facilitated by executive master's students, who also provided feedback on the realism and clarity of the scenarios. Sample details for each experiment are summarized below, and detailed in Table 1. For Experiments 1–3, data was gathered in coordination with the organizations' human resource departments.

For each experiment, I ran sensitivity analyses to estimate the smallest detectable effect with 80% power for (i) an independent-samples *t*-test (for the main effects of decision target on cognitive processing), using the *pwr* R package (Champely et al., 2020) and (ii) for an interaction between decision target and frame in a two-way ANOVA mixed design, using the *Superpower* R package (Caldwell et al., 2022). For details on the power analysis, please see the R code on the OSF page. Polman and Wu (2020) found a meta-analytic effect size of d = 0.10, but found effect sizes ranging from d = -0.66 to d = -0.78 in studies using decision problems similar to those used in the current experiments (i.e., high-stake hypothetical scenarios). Thus, the current experiments should be sufficiently powered to detect effects reported in the literature.

PsychOpen GOLD

Table 1

Overview of Samples

Experiment	Description	*N*	Age and gender	Education	Leadership role
1	Financial advisors at a large trade union in Norway.	271	Below 20: 0.82% 20–29 years: 12.35% 30–39 years: 16.87% 40–49 years: 24.28% 50–59 years: 30.86% 60–69 years: 13.17% 70 or above: 1.65% Male: 104 Female: 131 Other: 8	Primary school: 1.57% High school: 14.49% Bachelor's degree: 52.36% Master's degree or higher: 26.57%	No: 203 Yes: 40
2	Leaders working at a municipality in Norway. Leaders were recruited through the human resources department.	237	20–29 years: 0.70% 30–39 years: 28.17% 40–49 years: 49.65% 50–59 years: 49.65% 60–69 years: 21.68% Male: 50 Female: 161 Other: 3	Education: Primary school: 1.40% High school: 4.67% Bachelor's degree: 47.20% Master's or higher: 46.73%	No: 23 Yes: 191
3	Employees and leaders at a large hospital in Norway, recruited via the human resources department.	239	30–39 years: 9.41% 40–49 years: 31.19% 50–59 years: 45.03% 60–69 years: 21.37% Male: 56 Female: 156 Other: 5	Primary school: 0.46% High school: 8.33% Bachelor's degree: 58.80% Master's degree or higher: 32.87%	No: 5 Yes: 212

Experiment	Description	*N*	Age and gender	Education	Leadership role
4	A general sample of employees and leaders in Norway recruited mainly via LinkedIn.	590	Below 20: 0.72% 20–29 years: 3.07% 30–39 years: 16.23% 40–49 years: 38.23% 50–59 years: 30.48% 60–69 years: 9.02% 70 or above: 0.54% Male: 163 Female: 371 Other: 11	Primary school: 1.13% High school: 11.08% Bachelor's degree: 44.70% Master's degree or higher: 45.09%	No: 326 Yes: 219

Note. Demographic frequencies may not match the total sample size due to missing data on demographics.

Experiment 1—Financial Advisors at a Trade Union

Participants were 271 financial advisors working for a large trade union in Norway (see Table 1 for an overview of the sample). 141 participants were in the *Self* condition and 130 participants in the *Other* condition. The experiment has 80% power with a two-tailed α of 5% to detect an effect of Cohen's $d = 0.36$ in an independent samples *t*-test. For a cross-over interaction (i.e., a reversal of the framing effect in the *Other* vs. *Self* condition), the study has 80% power to detect a cross-over interaction of $\eta_p^2 = 0.030$.

Experiment 2—Leaders at a Local Government Organization

The sample consisted of 237 employees and leaders, predominantly leaders, working at a local government organization in Norway, recruited via the human resource department (see Table 1 for demographic information). Sensitivity analyses indicated that the study has 80% power to detect an effect of Cohen's $d = 0.39$ in an independent-samples *t*-test, and 80% power to detect a cross-over interaction of $\eta_p^2 = 0.033$. 117 participants were in the *Self* condition, and 120 were in the *Other* condition.

Experiment 3—Leaders at a Hospital

The sample consisted of 239 employees and leaders, mainly leaders, working at a large hospital, recruited via the human resource department (see Table 1 for demographic information). Sensitivity analyses indicated that the study has 80% power to detect an effect of Cohen's $d = 0.38$ in an independent samples *t*-test, and 80% power to detect a cross-over interaction of $\eta_p^2 = 0.034$. 113 participants were in the *Self* condition, and 126 were in the *Other* condition.

Experiment 4—General Sample of Employees and Leaders From Different Organizations

Experiment 4 used a larger and more general sample of employees and leaders recruited broadly via social media platforms (mainly LinkedIn), who completed a decision-making problem that was not tied to their professional background. The sample consisted of 590 participants (see Table 1 for demographic information). A sensitivity analysis indicated that this provides 80% power with a two-tailed α of 5% to detect a Cohen's $d = 0.25$ in an independent samples *t*-test, and 80% power to detect a cross-over interaction of $\eta_p^2 = 0.014$. 314 participants were in the *Self* condition, and 276 were in the *Other* condition.

Design and Procedure

All experiments used a 2 (decision target: self vs. other) x 2 (frame: gain vs. loss) design, with self-other as the between-subjects factor and frame as the within-subjects factor. The self-other manipulation was embedded in the decision problem. Participants read a hypothetical scenario (detailed in the next section), in which they had to choose between a safe and risky option, and indicated their preference for one option over the other. They did this twice, once in the gain frame and once in the loss frame. Once they had made a decision in both frames, they indicated the extent to which they processed information intuitively and analytically, reported their level of emotional arousal during the problem, and finally provided demographic information before being debriefed.

Risky Decision-Making Problem

In each experiment, participants completed a risky choice problem modeled on the classic Disease Problem (Kahneman & Tversky, 1979). The scenarios in these problems were modified to reflect the context of participants' organization and work, which differed in each of the four experiments reported here. The problems involved hypothetical scenarios and followed the dominant paradigm in the self-other risky decision-making literature (for comprehensive reviews and meta-analyses, see Batteux et al., 2019; Polman & Wu, 2020). Batteux et al.'s (2019) meta-analysis found no difference between real and hypothetical decisions.

Participants received the risky choice problem in both gain and loss frames (in Norwegian), in randomized order.[2] Following previous studies (e.g., DeKay & Dou, 2024), participants first chose between a certain option (coded as '0') and a risky option (coded as '1') and then indicated their preference for the risky option over the safe option (1 = *Strongly prefer Plan A*, 5 = *No preference*, 9 = *Strongly prefer Plan B*). I preregistered the use of a continuous measure instead of a binary choice variable as an index of risk-seeking to allow for greater sensitivity in detecting variability in risk preferences. The results were similar when using the binary choice variable (see the supplementary file on the OSF page; "supplementary.docx" in the folder "Supplementary", see Mayiwar, 2022b). In each experiment, participants were presented with a decision involving a safe option, which offered a smaller but certain outcome, and a risky option, which provided a chance for a larger outcome but with a higher risk of losing everything. Participants decided either for themselves or for a client (Experiment 1) or a colleague (in Experiments 2-4). Please see the supplementary file on OSF to see the risky choice problems (see Mayiwar, 2022b).

While the specific scenarios varied—ranging from pension investment decisions (Experiment 1) to job layoffs (Experiments 2 and 3), and salary negotiations (Experiment 4)—the underlying choice structure between a safe and risky option was similar. In Experiments 1 and 2, probabilities were presented as ratios (e.g., 1/3), which might have made the decision problem less intuitive for participants. Experiments 3 and 4 presented probabilities in percentages to provide a more accessible format that might help participants better understand the probabilities, potentially enhancing the effect of

2) Controlling for frame order did not change the results. Please see the supplementary file on the OSF page ("supplementary.docx" in the folder "Supplementary", see Mayiwar, 2022b).

deciding for others. In Experiment 4, I also modified the risky option to be less risky (lower probability of the worst outcome).

Intuitive and Analytical Processing

Participants completed a validated self-reported questionnaire of in-situ intuitive and analytical processing adapted from previous research (Sinclair et al., 2010). The questionnaire includes separate subscales for intuition and analysis, which have been differentially predicted by induced affect, individual differences in emotion regulation, and physiological arousal, while also predicting response time such that intuition processing correlates with lower response time and vice versa for analytical processing (Bakken & Hærem, 2020; Mayiwar & Hærem, 2023; Mayiwar et al., 2023; Sinclair et al., 2010). The two scales also correlate weakly, supporting the idea that they represent two independent modes of cognitive processing. These scales are conceptually grounded in well-established cognitive style frameworks, such as the Rational-Experiential Inventory (Epstein et al., 1996), which capture general preferences for intuitive versus analytical thinking. However, cognitive style measures are not suited to capturing how individuals process information during specific tasks. The same applies to other measures such as the Cognitive Reflection Test (CRT; Frederick, 2005).

The intuitive scale includes the following items: "I made the decision because it felt right to me", "I based the decision on my inner feelings and reactions", and "It was more important for me to feel that the decision was right than to have rational reasons for it". The analytical scale includes the following items: "I considered all alternatives carefully", "When making decisions, I considered both options", "I evaluated systematically all key uncertainties", "I analyzed all available information in detail," and "I considered all consequences for my decision". Participants rated their level of agreement with these statements on a scale from 1 (strongly disagree) to 9 (strongly agree). The intuitive scale demonstrated acceptable to good reliability in all experiments ($\alpha_{\text{intuitive}}$ = ranged from .63 to .76). The analytical scale demonstrated good reliability in all experiments ($\alpha_{\text{analytical}}$ = ranged from .83 to .87).

The intuitive and analytical scales correlated with response time in the expected directions. In addition, the two scales did not correlate with each other in any of the experiments, supporting the conceptualization of intuition and analysis as two independent modes of cognitive processing. Correlations are shown in Tables 2–5.

Affect

I used the self-assessment manikin (Bradley & Lang, 1994) to measure arousal (1 = *Calm*, 9 = *Aroused/Activated*) and valence (1 = *Unhappy*, 9 = *Happy*). Specifically, participants indicated how (i) calm-aroused and (ii) negative-positive they felt while making their choices. As specified in the preregistration, the main analysis focused on arousal. Results related to valence are reported in the supplementary file on OSF (see Mayiwar, 2022b).

Analytical Approach

Two-way ANOVAs were used to test the effect of decision target (self vs. other), frame (gain vs. loss), and their interaction on risk-seeking. Independent samples *t*-tests (Welch's test) were used to examine the impact of decision target on intuitive processing, analytical processing, and affect. I also ran correlations among all key variables, including response time (log-transformed to correct for the typical positive skew in this variable), education level, and gender. This was done to examine their associations with the intuitive and analytical processing scales as a test of the scales' validity. Studies that have measured people's general preference for intuitive and analytical processing have found that education level is negatively associated with intuitive processing and positively with analytical processing education (Aarnio & Lindeman, 2005). Moreover, previous studies that have used similar items to measure in-situ cognitive processing have found that female participants report greater reliance on affective intuition than male participants (Mayiwar et al., 2023; Sinclair et al., 2010), with similar findings in studies that have measured people's general preference for intuitive processing (Alós-Ferrer & Hügelschäfer, 2016). All tests used two-tailed *p*-values with a significance level threshold of 5%.

The data were analyzed in RStudio Version 4.3.2 (RStudio Team, 2023), with *tidyverse* Version 2.0.0 (Wickham et al., 2019), *ggplot2* Version 3.4.4 (Wickham, 2009), *psych* Version 2.3.12 (Revelle, 2024), *ggpubr* Version 0.6.0 (Kassambara, 2023), *kableExtra* Version 1.3.4.9 (Zhu et al., 2024), and *BayesFactor* (Morey et al., 2024). Figures were made using code by Allen et al. (2019). I used *statcheck* (Nuijten & Epskamp, 2014) to examine the consistency of calculated *p*-values. All results were consistent. The output file is available on the OSF page.

Exploratory and Supplementary Analyses

Preregistered Supplementary Analysis — As a supplementary analysis, I preregistered to run the same analyses after excluding those who failed an attention check (those who failed to correctly identify the scenario topic), indicated low seriousness while completing the experiment (on a 9-point scale, from *not serious at all* to *very serious*), and those who spent less than two minutes on the entire experiment. The results remained similar, with two exceptions, where in the supplementary analysis, Experiment 3 found an effect of decision target on analytical processing, but in the opposite direction of what was hypothesized, and an interaction between decision target and frame albeit the *p*-value was close to 0.05 (p = .047). Please see the OSF page for details ("supplementaryexclusions.html" files, see Mayiwar, 2022b).

Exploratory Analyses — Null findings were followed up with Bayesian analyses to quantify evidence in support of the alternative hypothesis over the null hypothesis (BF_{10}), and the null hypothesis relative to the alternative hypothesis (BF_{01}). BF_{01} values >1 indicate evidence for the null hypothesis over the alternative hypothesis: 1–3 (anecdotal/weak evidence), 3–10 (moderate evidence), 10–30 (strong evidence), 30–100 (very strong evidence) and >100 (extreme evidence) (Quintana & Williams, 2018). Conversely, BF10 values >1 indicate evidence for the alternative hypothesis over the null, with the same thresholds for interpretation.

I used the default Cauchy prior with a scale parameter $r = 0.707$ in the *BayesFactor* R package. This prior assumes smaller effect sizes are more likely, while still allowing for larger effects. The scaling factor corresponds to a medium effect size under the alternative hypothesis. The default prior seemed like a reasonable choice given that this analysis was not preregistered and effect sizes in similar decision-making studies have been found to range from $d = -0.66$ to $d = -0.78$ in Polman and Wu's (2020) meta-analysis.

Moreover, I ran several exploratory analyses. First, I used the binary risky choice variable as an outcome variable instead of the preregistered continuous risk preference measure. Second, I used response time (seconds spent on making a decision) as a proxy for cognitive processing. Third, I ran a pooled analysis using mixed-effects modeling that combined data across all four experiments, with random intercepts for participants and experiment. Additional exploratory analyses reported in the supplementary file examined framing susceptibility, valence (i.e., how pleasant-unpleasant participants felt while making a decision), psychological distance (i.e., how distant the scenario felt), and moderation by leadership status. Full results for all exploratory analyses are reported in the supplementary file on OSF (see Mayiwar, 2022b).

Results

Key results of each experiment are plotted in Figures 1–4.

Experiment 1 Results (Financial Advisors at a Large Trade Union; Pension Investment)

Descriptives and Correlations

Descriptive statistics and correlations for the key dependent variables (intuition and analysis) and the main independent variable are presented in Table 2. Response time, education, and gender are also included to explore the validity of the cognitive processing measures, based on the expectation that intuition would be higher and analysis lower among individuals with faster response times, female (compared to male) participants, and those with lower education.

Table 2

Descriptives and Correlations (Experiment 1)

Variable	*N*	*M*	*SD*	1	2	3	4	5	6	7	8	9
1. Other (vs. Self)	271	1.48	0.50									
2. Intuition	245	5.39	1.94	-.19**								
				p = .003								
3. Analysis	245	6.46	1.59	.06	-.01							
				p = .315	*p* = .887							
4. Arousal	245	3.55	1.91	-.02	.03	-.13*						
				p = .790	*p* = .610	*p* = .047						
5. RT-Gain	271	1.62	0.31	.07	-.01	.21***	-.13*					
				p = .269	*p* = .897	*p* < .001	*p* = .038					
6. RT-Loss	271	1.74	0.34	.01	-.04	.18**	-.02	.34***				
				p = .872	*p* = .520	*p* = .005	*p* = .750	*p* < .001				
7. Risk-Gain	271	3.17	2.11	-.12*	.16*	-.08	.17**	-.06	-.06			
				p = .043	*p* = .011	*p* = .240	*p* = .008	*p* = .321	*p* = .341			
8. Risk-Loss	271	3.48	2.05	-.00	.08	-.06	.10	.01	.00	.36***		
				p = .960	*p* = .186	*p* = .340	*p* = .128	*p* = .892	*p* = .938	*p* < .001		
9. Education	243	3.09	0.70	.01	-.14*	.09	-.03	.12	.10	-.10	-.06	
				p = .838	*p* = .026	*p* = .145	*p* = .675	*p* = .071	*p* = .113	*p* = .125	*p* = .325	
10. Female	235	1.56	0.50	-.06	.16*	.01	.17	-.04	-.03	.16*	.12	-.19**
				p = .369	*p* = .014	*p* = .893	*p* = .010	*p* = .515	*p* = .653	*p* = .011	*p* = .063	*p* = .003

Note. *N* = number of cases. *M* = mean. *SD* = standard deviation. RT = response time in seconds (log-transformed).

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

Response time in both frames correlated positively and significantly with analytical processing, and negatively but not significantly with intuitive processing. Intuitive processing correlated negatively with education level and positively with female participants. These correlations are consistent with previous research.

Effect of Decision Target and Frame on Risk Preference

There was a main effect of frame, $F(1, 269) = 5.15$, $p = .024$, $\eta_p^2 = .019$, 95% CI [.000, 0.063], $M_{Gain} = 3.16$, $M_{Loss} = 3.48$, $BF_{10} = 0.43$, $BF_{01} = 2.34$, but no effect of decision target, $F(1, 269) = 1.62$, $p = .204$, $\eta_p^2 = .006$ 95% CI [.000, 0.037], $M_{Self} = 3.45$, $M_{Other} = 3.19$, $BF_{10} = 0.28$, $BF_{01} = 3.59$, and no interaction between decision target and frame, $F(1, 269) = 3.14$, $p = .077$, $\eta_p^2 = .012$, 95% CI [.000, 0.049], $BF_{10} = 0.04$, $BF_{01} = 25.21$. The Bayes factor for the interaction indicates moderate evidence for the null (i.e., moderate evidence supporting the absence of a meaningful interaction). A power analysis using the *Superpower* package in R (Caldwell & Lakens, 2020) estimated a required total sample size of $N = 698$ to detect the observed interaction with 80% power (code available on OSF, see Mayiwar, 2022b).

Effect of Decision Target on Information Processing

Participants reported processing information more intuitively in the *Self* condition ($M = 5.74$) compared to the *Other* condition ($M = 5.01$), $t(235.35) = 3.00$, $p = .003$ (two-tailed), $d = -0.39$, 95% CI [-0.64, -0.13], $BF_{10} = 9.71$, $BF_{01} = 0.10$. The Bayes Factor indicates strong evidence for the alternative hypothesis.

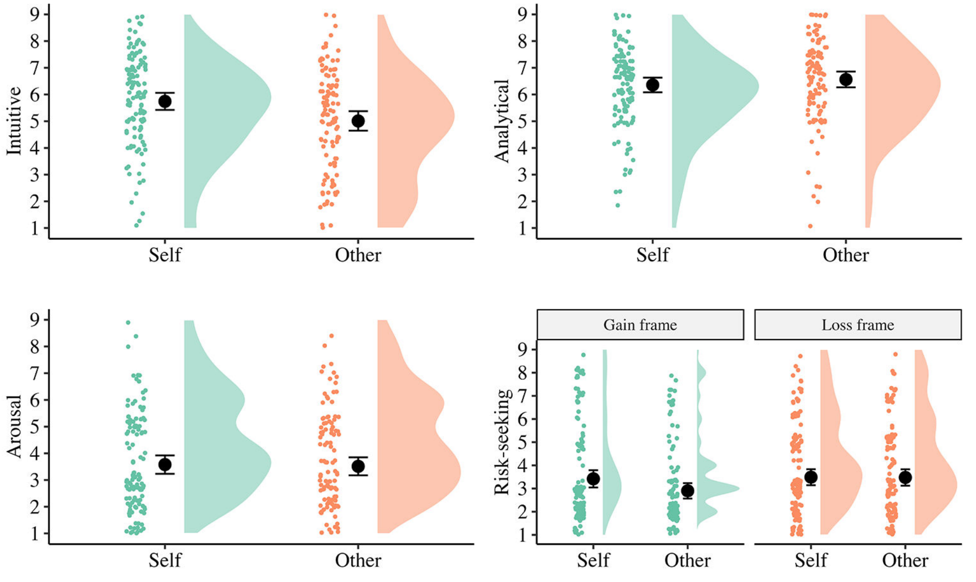
There was no significant difference in analytical processing between the *Self* ($M = 6.36$) and *Other* conditions ($M = 6.56$), $t(239.83) = -1.00$, $p = .316$ (two-tailed), $d = 0.13$, 95% CI [-0.12, 0.38], $BF_{10} = 0.23$, $BF_{01} = 4.43$. The Bayes factor indicates moderate evidence for the null hypothesis.

Effect of Decision Target on Affect

There was no difference in arousal between the *Self* ($M = 3.58$) and *Other* conditions ($M = 3.51$), $t(242.85) = 0.27$, $p = .789$ (two-tailed), $d = -0.03$, 95% CI [-0.28, 0.22], $BF_{10} = 0.14$, $BF_{01} = 6.91$. The Bayes Factor indicates moderate evidence for the null hypothesis.

Figure 1

Raincloud Plots (Experiment 1)



Note. The effect of deciding for others (vs. oneself) on key variables. Raincloud plots are used to visualize raw data, key summary statistics, and the distribution of the data. Black circles denote mean values. Error bars denote 95% confidence intervals.

Brief Summary of Experiment 1

Experiment 1 found no main effect of decision target on risk preference, and no interaction with frame. Nevertheless, there was a main effect of frame, indicating greater risk-seeing in loss (vs. gain) frames. Moreover, decision target impacted intuitive processing; deciding for clients (vs. self) reduced intuitive processing. There was no effect on analytical processing or arousal.

Experiment 2 Results (Leaders at a Local Government Organization; Job Layoffs)

Descriptives and Correlations

Descriptive statistics and correlations are shown in Table 3. Response time correlated negatively with intuitive processing, but this was only significant in the gain frame, whereas the correlations with analytical processing were positive but not significant. Intuitive processing was negatively correlated with education level, but contrary to Experiment 1, it did not significantly correlate with gender.

Table 3

Descriptives and Correlations (Experiment 2)

Variable	*N*	*M*	*SD*	1	2	3	4	5	6	7	8	9
1. Other (vs. Self)	237	1.51	0.50									
2. Intuition	216	4.86	1.73	.04								
				p = .597								
3. Analysis	216	6.49	1.52	-.00	-.04							
				p = .968	p = .578							
4. Arousal	215	4.19	2.16	-.18**	.23***	-.10						
				p = .009	p < .001	p = .151						
5. RT-Gain	237	1.69	0.31	.06	-.19**	.10	.07					
				p = .390	p = .005	p = .162	p = .285					
6. RT-Loss	237	1.68	0.29	.01	-.09	.04	-.01	.12				
				p = .821	p = .189	p = .570	p = .852	p = .066				
7. Risk-Gain	237	4.30	2.18	-.03	.20**	.01	.14*	-.08	.08			
				p = .637	p = .004	p = .879	p = .035	p = .201	p = .203			
8. Risk-Loss	237	4.70	2.23	.02	.12	-.01	.10	-.09	.01	.51***		
				p = .774	p = .079	p = .866	p = .131	p = .189	p = .887	p < .001		
9. Education	214	3.39	0.65	-.07	-.22**	-.11	-.12	.04	.00	-.14*	-.08	
				p = .335	p = .001	p = .121	p = .074	p = .534	p = .995	p = .042	p = .224	
10. Female	211	1.76	0.43	.00	-.12	.07	.10	.10	.06	-.04	-.02	.22**
				p = .983	p = .082	p = .333	p = .146	p = .149	p = .386	p = .560	p = .787	p = .001

Note. N = number of cases. *M* = mean. *SD* = standard deviation. RT = response time in seconds (log-transformed).
*p < .05. **p < .01. ***p < .001.

Effect of Decision Target and Frame on Risk Preference

A two-way ANOVA indicated a main effect of frame, $F(1, 235) = 7.98$, $p = .005$, $\eta_p^2 = .033$, 95% CI [.003, 0.089], $M_{Gain} = 4.3$, $M_{Loss} = 4.7$, $BF_{10} = 0.68$, $BF_{01} = 1.48$, but no main effect of decision target, $F(1, 235) = 0.01$, $p = .919$, $\eta_p^2 = .000$, 95% CI =[000, 0.010], $M_{Self} = 4.51$, $M_{Other} = 4.49$, $BF_{10} = 0.10$, $BF_{01} = 9.73$, nor an interaction between decision target and frame, $F(1, 235) = 0.59$, $p = .442$, $\eta_p^2 = .003$, 95% CI [.000, 0.031], $BF_{10} = 0.01$, $BF_{01} = 97.22$. The Bayes factor for the interaction indicates strong evidence for the null. A power analysis estimated a required total sample size of $N = 2{,}000$ to detect the observed interaction with 80% power.

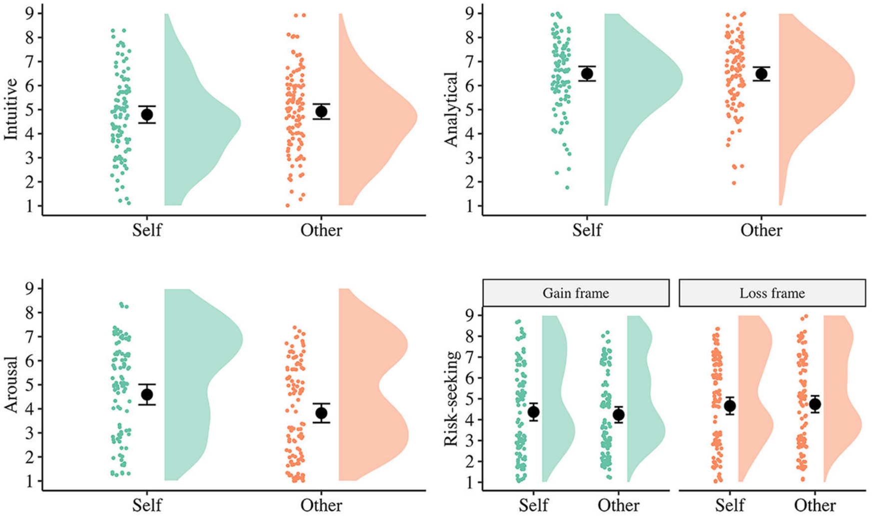
Effect of Decision Target on Information Processing

There was no difference in intuitive processing between the *Self* ($M = 4.79$) and *Other* conditions ($M = 4.92$), $t(209.45) = -0.53$, $p = .598$ (two-tailed), $d = 0.07$, 95% CI [-0.19, 0.34], $BF_{10} = 0.17$, $BF_{01} = 5.90$. The Bayes Factor indicates moderate evidence for the null hypothesis.

Similarly, there was no difference in analytical processing between the *Self* ($M = 6.49$) and *Other* conditions ($M = 6.48$), $t(211.45) = 0.04$, $p = .968$ (two-tailed), $d = -0.01$, 95% CI [-0.27, 0.26], $BF_{10} = 0.15$, $BF_{01} = 6.73$. The Bayes Factor indicates moderate evidence for the null hypothesis.

Figure 2

Raincloud Plots (Experiment 2)



Note. The effect of deciding for others (vs. oneself) on key variables. Raincloud plots are used to visualize raw data, key summary statistics, and the distribution of the data. Black circles denote mean values. Error bars denote 95% confidence intervals.

Effect of Decision Target on Affect

Arousal was higher in the *Self* condition (M = 4.59) compared to the *Other* condition (M = 3.82), t(210.15) = 2.65, p = .009 (two-tailed), d = -0.36, 95% CI [-0.63, -0.09], BF_{10} = 3.89, BF_{01} = 0.26. The Bayes Factor indicates moderate evidence for the alternative hypothesis.

Brief Summary of Experiment 2

Consistent with Experiment 1, Experiment 2 found no main effect of decision target on risk preference and no interaction with frame, but a main effect of frame indicating greater risk-seeking for losses over gains. Deciding for others (vs. the self) did not impact any of the two modes of cognitive processing or arousal.

Experiment 3 Results (Leaders at a Hospital; Job Layoffs)

Descriptives and Correlations

Descriptive statistics and correlations are presented in Table 4.

Response time correlated positively with analytical processing, but this was only significant in the loss frame, whereas the correlations with intuitive processing were negative but not significant. Intuitive processing was negatively correlated with education level.

Effect of Decision Target and Frame on Risk Preference

There was a main effect of frame, F(1, 237) = 9.82, p = .002, ηp^2 = .040, 95% CI [0.006, 0.099], BF_{10} = 0.72, BF_{01} = 1.39, with higher risk preference in the loss frame (M = 4.44) compared to the gain frame (M = 4.11). There was no main effect of decision target, F(1, 237) = 0.01, p = .936, ηp^2 = .000, 95% CI [0.000, 0.008], M_{Self} = 4.28, M_{Other} = 4.27, BF_{10} = 0.10, BF_{01} = 9.78, and no interaction between decision target and frame F(1, 237) = 0.94, p = .333, ηp^2 = .004, 95% CI [0.000, 0.035], BF_{10} = 0.01, BF_{01} = 83.86,. A power analysis estimated a required total sample size of N = 1,456 to detect the observed interaction with 80% power.

Effect of Decision Target on Information Processing

There was no difference in intuitive processing between the *Self* (M = 4.97) and *Other* conditions (M = 4.84), t(215.55) = 0.63, p = .531 (two-tailed), d = -0.09, 95% CI [-0.35, 0.18], BF_{10} = 0.18, BF_{01} = 5.62. The Bayes Factor indicates moderate evidence for the null hypothesis.

Similarly, there was no difference in analytical processing between the *Self* (M = 6.57) and *Other* conditions (M = 6.26), t(207.18) = -1.78, p = .076 (two-tailed), d = -0.24, 95% CI [-0.51, 0.02], BF_{10} = 0.67, BF_{01} = 1.50. The Bayes Factor indicates anecdotal evidence for the null hypothesis.

Table 4

Descriptives and Correlations (Experiment 3)

Variable	*N*	*M*	*SD*	1	2	3	4	5	6	7	8	9
1. Other (vs. Self)	239	1.53	0.50									
2. Intuition	218	4.90	1.57	-.04								
				p = .533								
3. Analysis	218	6.40	1.30	-.12	.02							
				p = .074	p = .810							
4. Arousal	218	4.52	1.96	.03	.19***	.12						
				p = .636	p = .005	p = .067						
5. RT-Gain	239	1.74	0.33	.04	-.04	.06	.03					
				p = .520	p = .582	p = .392	p = .676					
6. RT-Loss	239	1.73	0.32	-.04	-.10	.17*	-.08	-.02				
				p = .542	p = .151	p = .010	p = .255	p = .778				
7. Risk-Gain	239	4.10	1.84	-.03	-.05	-.03	.00	-.07	-.04			
				p = .613	p = .502	p = .653	p = .993	p = .273	p = .551			
8. Risk-Loss	239	4.44	1.85	.02	-.10	-.09	.02	.02	.01	.60***		
				p = .721	p = .137	p = .178	p = .729	p = .742	p = .880	p < .001		
9. Education	217	3.24	0.61	-.01	-.22***	-.02	-.05	.04	.04	-.04	.03	
				p = .861	p < .001	p = .734	p = .462	p = .592	p = .513	p = .600	p = .628	
10. Female	212	1.74	0.44	.03	.08	.12	.31***	.12	.05	.02	.03	.10
				p = .682	p = .265	p = .087	p < .001	p = .080	p = .429	p = .757	p = .651	p = .132

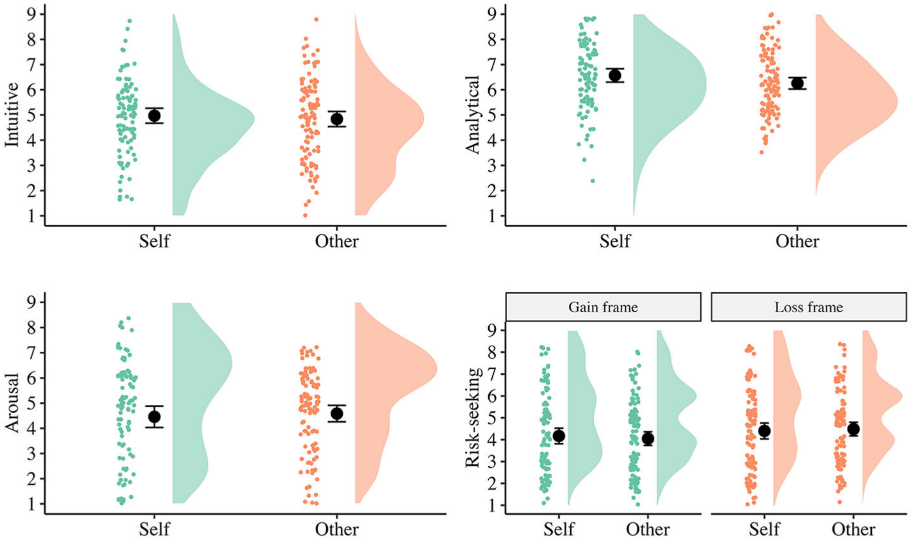
Note. N = number of cases. M = mean. SD = standard deviation. RT = response time in seconds (log-transformed).
*$p < .05$. ** $p < .01$. *** $p < .001$.

Effect of Decision Target on Affect

There was no difference in arousal between the *Self* (M = 4.56) and *Other* conditions (M = 4.58), t(197.27) = -0.47, p = .640 (two-tailed), d = 0.06, 95% CI [-0.20, 0.33], BF_{10} = 0.16, BF_{01} = 6.08. The Bayes Factor indicates moderate evidence for the alternative hypothesis.

Figure 3

Raincloud Plots (Experiment 3)



Note. The effect of deciding for others (vs. oneself) on key variables. Raincloud plots are used to visualize raw data, key summary statistics, and the distribution of the data. Black circles denote mean values. Error bars denote 95% confidence intervals.

Brief Summary of Experiment 3

The results from Experiment 3 were consistent with Experiments 1 and 2: Deciding for others (vs. the self) did not impact any of the outcome variables and did not interact with frame in predicting risk-seeking, but there was a main effect of frame, indicating greater risk-seeking for losses over gains.

Experiment 4 Results (General Sample; Salary Negotiation)

Descriptives and Correlations

Descriptive statistics and correlations are presented in Table 5. Response time correlated negatively with intuitive processing, but this was only significant in the loss frame, whereas the correlations with analytical processing were positive and significant in both frames. Intuitive processing was negatively correlated with education level.

Table 5

Descriptives and Correlations (Experiment 4)

Variable	*N*	*M*	*SD*	1	2	3	4	5	6	7	8	9
1. Other (vs. Self)	590	1.47	0.50									
2. Intuition	520	5.61	1.69	-.03								
				p = .549								
3. Analysis	520	6.03	1.57	.02	-.07							
				p = .665	p = .117							
4. Arousal	547	3.15	2.07	-.07	.05	-.04						
				p = .091	p = .261	p = .310						
5. RT-Gain	590	1.59	0.28	.09*	-.04	.17**	.01					
				p = .028	p = .380	p < .001	p = .768					
6. RT-Loss	590	1.65	0.30	.03	-.11*	.18**	.11*	.27**				
				p = .519	p = .011	p < .001	p = .010	p < .001				
7. Risk-Gain	590	3.28	2.14	-.01	-.16**	.02	.07	.09*	.07			
				p = .827	p < .001	p = .641	p = .103	p = .028	p = .079			
8. Risk-Loss	590	3.61	2.26	-.01	-.15**	.04	.06	.07	.08*	.74**		
				p = .746	p < .001	p = .329	p = .179	p = .106	p = .049	p < .001		
9. Education	545	3.31	0.71	.01	-.16**	-.07	-.04	-.11**	-.06	.05	.06	
				p = .853	p < .001	p = .131	p = .392	p = .010	p = .158	p = .286	p = .146	
10. Female	534	1.69	0.46	-.00	.08	-.19**	.12**	-.02	-.03	-.12**	-.15**	.08
				p = .988	p = .085	p < .001	p = .005	p = .712	p = .484	p = .006	p < .001	p = .069

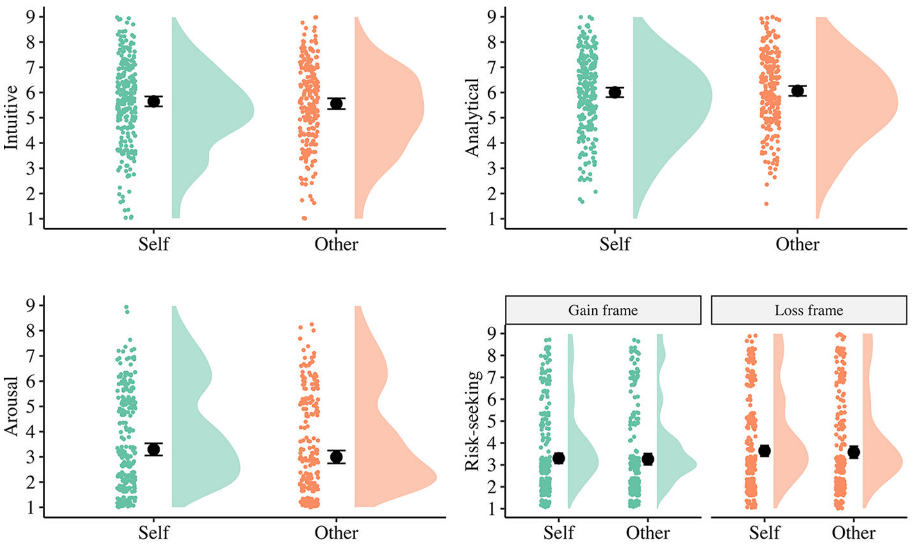
Note. N = number of cases. M = mean. SD = standard deviation. RT = response time in seconds (log-transformed).
*p < .05. **p < .01. ***p < .001.

Effect of Decision Target and Frame on Risk Preference

A two-way ANOVA indicated a main effect of frame, $F(1, 588) = 25.35$, $p < .001$, $\eta_p^2 = .041$, 95% CI =[.016, 0.077], $M_{Gain} = 3.28$, $M_{Loss} = 3.61$, $BF_{10} = 1.74$, $BF_{01} = 0.58$, but no main effect of decision target, $F(1, 588) = 0.09$, $p = .770$, $\eta_p^2 = .000$, 95% CI [.000, 0.008], $M_{Self} = 3.47$, $M_{Other} = 3.42$, $BF_{10} = 0.07$, $BF_{01} = 14.22$, and no interaction between decision target and frame, $F(1, 588) = 0.03$, $p = .867$, $\eta_p^2 = .000$, 95% CI [.000, 0.006], $BF_{10} = 0.01$, $BF_{01} = 92.59$. The Bayes factor for the interaction indicates strong evidence for the null. A power analysis indicated a nearly flat power curve, indicating that even with a total sample size of $N = 2{,}000$, the analysis would barely achieve 10% power. This suggests that the interaction effect is extremely weak, if present at all.

Figure 4

Raincloud Plots (Experiment 4)



Note. The effect of deciding for others (vs. oneself) on key variables. Raincloud plots are used to visualize raw data, key summary statistics, and the distribution of the data. Black circles denote mean values. Error bars denote 95% confidence intervals.

Effect of Decision Target on Information Processing

There was no difference in intuitive processing between the *Self* ($M = 5.65$) and *Other* conditions ($M = 5.56$), $t(509.53) = 0.60$, $p = .550$ (two-tailed), $d = -0.05$, 95% CI [-0.22, 0.12], $BF_{10} = 0.12$, $BF_{01} = 8.60$. The Bayes Factor indicates moderate evidence for the null hypothesis.

Similarly, there was no difference in analytical processing between the *Self* ($M = 6.00$) and *Other* conditions ($M = 6.06$), $t(513.45) = -0.43$, $p = .665$ (two-tailed), $d = 0.04$, 95% CI

[-0.13, 0.21], BF_{10} = 0.11, BF_{01} = 9.35. The Bayes Factor indicates moderate evidence for the null hypothesis.

Effect of Decision Target on Affect

There was no difference in arousal between the *Self* (*M* = 3.30) and *Other* conditions (*M* = 3.00), *t*(538.38) = 1.69, *p* = .091 (two-tailed), *d* = -0.15, 95% CI [-0.31, 0.02], BF_{10} = 0.38, BF_{01} = 2.61. The Bayes Factor indicates moderate evidence for the alternative hypothesis.

Brief Summary of Experiment 4

The results from Experiment 4 were consistent with Experiment 3: Deciding for others (vs. the self) did not impact any of the outcome variables and did not interact with frame in predicting risk-seeking, but there was a main effect of frame, indicating greater risk-seeking for losses over gains.

Exploratory Analyses

For a detailed overview of all exploratory results, see the supplementary file on the OSF page (file “supplementary.docx” in the folder “Supplementary”, see Mayiwar, 2022b).

For the binary risky choice variable, only Experiment 1 found a main effect of decision target (*B* = -0.93, *p* = .009, 95% CI [-1.63, -0.23]). None of the experiments found an interaction between decision target and frame (for a general overview of the proportion of safe vs. risky choices across experiments and frames, see Figure S2 in the supplementary).

For response time, none of the experiments showed an effect of decision target or an interaction between decision target and frame. Although Experiments 1 and 4 found a significant effect of frame, indicating greater decision time in loss (vs. gain) frames, consistent with previous research (Carpenter & Munro, 2025; Yechiam & Hochman, 2013), with a similar though non-significant pattern in the other two experiments. Results were consistent whether using the raw response time values or log-transformed values to account for positive skew.

Finally, the pooled data analysis using mixed-effects modeling revealed no effects on risk-seeking or any of the two modes of cognitive processing, but a significant effect on arousal, indicating lower arousal in decisions for others, albeit the *p*-value was only marginally significant (*B* = -0.26, *p* = .027, 95% CI [-0.45, -0.07]).

Discussion

Four experiments tested self-other differences in risk-seeking and cognitive processing among practitioners working at different organizations (financial advisors at a trade union, leaders at a local government organization, leaders at a hospital, and finally, a larger and diverse sample of employees and leaders from different organizations). There was very weak evidence for any self-other differences in risk preference (or risky choice), intuitive processing, analytical processing, or affect (subjective arousal and valence). Participants in all four experiments were sensitive to gain and loss framing, regardless of whether decisions were made for oneself or someone else. Specifically, consistent with Prospect Theory (Kahneman & Tversky, 1979), participants were more risk-seeking in the loss frame than in the gain frame gains across all experiments. A Bayesian analysis generally indicated strong evidence in favor of the absence of an interaction between decision target and frame.

Only Experiment 1 found a significant and negative effect of deciding for a client (vs. the self) on risk-seeking, albeit only in the exploratory analysis using the binary risky choice variable instead of the preregistered continuous risk preference variable. Furthermore, only Experiment 1 found an effect of decision target on self-reported intuitive processing (but not analytical processing). Specifically, financial advisors who decided for a client reported relying less on intuition to make their choices. In addition, supplementary analysis showed an indirect effect of decision target on risk-seeking across frames via reduced intuitive processing (reported in the supplementary file on the OSF page, see Mayiwar, 2022b).

One possible explanation for this unique finding among financial advisors compared to other professional groups could be the nature of their professional training and social norms emphasizing caution and deliberation. Financial advisors are frequently trained to make calculated, objective decisions for clients, which may heighten their sensitivity to decision contexts involving others. This is in line with a study by Roszkowski and Snelbecker (1990) that found that financial service professionals made more conservative investment decisions for clients compared to themselves. Roszkowski and Snelbecker (1990) noted that financial advisors might be particularly risk-averse when deciding for clients given that they typically receive professional training to make calculated, objective decisions for clients. Indeed, Norway introduced the Authorization Scheme for Savings and Investment in 2009 (AFR; https://www.finaut.no/english/), a certification program to ensure that financial advisors offer well-informed recommendations based on careful deliberation. In the remaining experiments, the lack of such explicit training, and perhaps combined with the moral rule to "decide for others as if you would decide for yourself", might have concealed the effect of decision target in the present study.

Overall, the current findings suggest that, at least in the professional domain, self–other differences may be weak and highly context-dependent. This study contributes to the limited body of research examining how such differences interact with gain–loss framing in risky decision-making. One exception is a study by Raue et al. (2015), which found consistent interactions between psychological distance and framing among students as well as physicians and hotel managers. However, their design simultaneously manipulated three dimensions of psychological distance—social, temporal, and spatial—

as outlined in Construal Level Theory (Trope & Liberman, 2010). While informative, this multidimensional manipulation makes it difficult to isolate the unique contribution of social distance (i.e., self vs. other). By contrast, the present research focused exclusively on social distance, offering a more targeted test of how this specific dimension interacts with framing effects in applied decision contexts.

The current findings also align with meta-analyses that have found no to very small overall meta-analytic effects and with large heterogeneity across decision contexts, such as the decision domain, choice recipient, and frame (Batteux et al., 2019; Polman & Wu, 2020).

Overall, despite the very weak evidence of self-other differences in the current study, the consistent effect of gain and loss framing on risk—reflecting loss aversion—might actually be encouraging for practitioners. Recent research has found that people trust decision-makers more and view them as more effective leaders when they display sensitivity to framing effects (Dorison & Heller, 2022). McKenzie and colleagues (McKenzie & Nelson, 2003; Sher & McKenzie, 2006) argue that sensitivity to framing—that is, responding differently to logically equivalent descriptions—is not necessarily irrational. Rather, it reflects an attunement to informative cues implied by the speaker's choice of framing, which can convey otherwise 'hidden' information about the situation.

Limitations and Future Research

Several limitations should be noted. Although the present experiments used larger samples than most previous studies on self–other decision-making, it remains possible that small effects exist but went undetected. Larger samples would be needed to reliably capture such effects, especially given that published effect sizes are often inflated. For instance, the experiments were underpowered to detect knock-out (i.e., framing effect appearing in only the Self condition) and attenuation interactions (i.e., framing effect being reduced in the *Other* condition), which require substantially larger sample sizes than cross-over interactions.

Moreover, while the use of one-shot, description-based tasks with hypothetical scenarios is consistent with established paradigms in decision-making research, it clearly does not fully capture the complexity of real-world contexts. Such tasks lack the emotional, contextual, and experiential factors that professionals must navigate in high-stakes, real-world decisions. Even though the decision problems were designed to reflect participants' professional backgrounds to enhance realism (in Experiments 1–3), they are still simplified representations. It is worth noting, however, that Batteux et al.'s (2019) meta-analysis, which found no self-other differences overall, also found no differences between hypothetical and real decisions.

Furthermore, the sample consisted of Norwegian professionals from a relatively narrow range of sectors (e.g., financial advisors, government leaders, healthcare managers). As such, the findings may not fully generalize to other cultural or professional contexts, where decision-making norms and risk preferences may differ. Relatedly, in all but Experiment 1, the 'other' recipient was framed as a colleague; different patterns might emerge in relationships involving clearer principal–agent dynamics (Eisenhardt, 1989), such as client–advisor or manager–subordinate roles.

In terms of the results pertaining to cognitive processing, these may not generalize to other measures of cognitive processing, such as process-tracing methods. It is worth noting, however, that the current experiments also included response time as a behavioral proxy for cognitive processing, still with no significant effects. The self-reported measures used here provide a direct assessment of cognitive modes, enabling precise testing of influential models such as the risk-as-feelings vs. risk-as-analysis framework (Loewenstein et al., 2001). Self-reported measures of cognitive processing remain the dominant approach in decision-making research, as in the cognitive styles literature. They are also highly reliable (Corneille & Gawronski, 2024), and evidence suggests individuals possess good introspective access to their cognitive processes (Morris et al., 2023). Nevertheless, future work might benefit from incorporating alternative or process-tracing methods to further assess decision-making mode.

Finally, the present research focuses specifically on risky decision-making in professional contexts and does not address all potential boundary conditions of self–other differences. For instance, while Experiment 4 incorporated a more general sample and a less domain-specific decision problem, the study does not systematically compare professional and non-professional contexts, nor does it include non-experts making decisions in professional domains. These are promising directions for future research that could clarify the role of contextual relevance and expertise. Future research could also explore whether professionals exhibit stronger self-other differences in other cognitive biases, such as the anchoring effect or availability heuristic.

Conclusion

The present study finds very weak evidence for self–other differences in risk-seeking and cognitive processing (both intuitive and analytical) within professional populations. Given the importance of null results for clarifying prior findings and theoretical claims —and the tendency for such results to be underreported—I hope the present study contributes to refining our understanding of self–other decision-making and provides a foundation for future research using more ecologically valid settings.

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Author Contributions: *Lewend Mayiwar*—Conceptualization | Methodology | Software | Validation | Formal analysis | Investigation | Resources | Data curation | Writing – original draft | Writing – review & editing | Project administration.

Ethics Statement: The study was conducted in accordance with ethical guidelines set by the Norwegian Agency for Shared Services in Education and Research (SIKT) and did not require ethical approval as no personal or sensitive data were collected. Informed consent was obtained from all participants.

Preregistration statement: The study hypotheses, methods, and analytical plan were preregistered and can be accessed on OSF (see Mayiwar, 2022a).

Author Note: Lewend Mayiwar is now at Oslo Business School, OsloMet—Oslo Metropolitan University.

Data Availability: Data, code, and materials are available (see Mayiwar, 2022b).

Supplementary Materials

For this article, the following Supplementary Materials are available:

- Preregistration (see Mayiwar, 2022a)
- Data, code, materials (see Mayiwar, 2022b)

Index of Supplementary Materials

Mayiwar, L. (2022a). *Social distance and risky decision making* [Preregistration]. OSF Registries. https://osf.io/tr6pd

Mayiwar, L. (2022b). *(Almost) no evidence of self–other differences in risk preferences and cognitive processing among professionals in contextualized risky-choice framing tasks* [Data, code, materials]. OSF. https://osf.io/x96cd/

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