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Leading with Generosity and Responsibility through Reward Allocation Decisions in Teams*

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Abstract

Leadership generosity and responsibility are crucial elements in organizational management, particularly when leaders allocate rewards among team members. Through theoretical modeling and experimental validation, we examine leaders' allocation decisions before the project begins and after its outcomes are realized, and how these behavioral tendencies depend on personal traits. Using a preregistered randomized controlled experiment with 520 participants, we examine leaders' tendency to take a smaller share for themselves—enhancing effort through generous commitment before the project starts and signaling responsibility after poor performance—as well as the role of personal traits in shaping behavioral styles. Our theoretical framework predicts that more altruistic leaders will demonstrate stronger generous commitment while less altruistic leaders will demonstrate greater responsibility following negative outcomes. The empirical findings largely support these predictions. Female leaders show more generosity, while both genders demonstrate responsibility by reducing self-allocation following negative outcomes, albeit through different psychological mechanisms. Personality traits, especially altruism, as well as other psychological factors, moderate these behaviors, with traits traditionally associated with “strong” leadership often negatively related to responsibility. These findings provide insights into leadership decision-making, with implications for organizational design and leadership development.

Keywords: team production, leadership style, gender differences, reward allocation, generosity, responsibility, survey experiment

JEL Classification M52, M54, D91, D23.

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1 Introduction

In organizational management, leaders often face opportunities—and sometimes pressures—to demonstrate their commitment and accountability through reward allocation decisions. Leaders’ generosity in reward allocation is widely recognized as a hallmark of effective leadership. Such generous commitment can enhance team motivation and foster a culture of mutual trust and dedication. For instance, in 2015, Dan Price, CEO of Gravity Payments, raised the minimum salary of all his employees to \$70,000 by cutting his own salary by \$1 million. To achieve this, he sold his second home and used his savings.¹ Similarly, Steve Jobs of Apple and Eric Schmidt of Google chose to work for nominal “one-dollar salaries,” emphasizing their commitment to their organizations.²

A leader’s true character often emerges not in moments of success, but in how they handle responsibility after outcomes are known. Demonstrating responsibility—especially by sharing the burden of negative consequences—reflects integrity and dedication to organizational values. Tony Hayward, BP’s CEO during the 2010 Gulf of Mexico oil spill, declined his annual bonus to acknowledge his accountability for the crisis.³ By contrast, Volkswagen’s CEO Martin Winterkorn retained substantial retirement benefits after the 2015 emissions scandal, sparking widespread public criticism.⁴

While these examples highlight how reward allocation serves as a visible mechanism for leadership qualities, little is known about the underlying factors that determine when and why leaders make such decisions. In team projects, rewards play a key role in influencing members’ motivation and effort, making leaders’ decisions critical for team performance. However, two crucial aspects of these decisions remain underexplored: leaders’ generous commitment through early reward allocation and their responsibility demonstrated through post-outcome adjustments. Both the timing of these decisions—whether made before project completion or after outcomes are known—and individual characteristics of leaders may significantly affect their choices.

Despite prior research examining either commitment or accountability in isolation, our study offers the first comprehensive framework integrating both aspects of leadership decision-making, with a particular focus on generous commitment and responsible accountability strategies.⁵ Through theoretical modeling and experimental validation, we examine the leader’s allocation decisions when they can commit before production and after outcomes are realized. Specifically, we analyze how leaders balance the motivational benefits of pre-project generosity against personal incentives and how they weigh reputation costs against immediate benefits when demonstrating responsibility.

We first present a theoretical model in which a team with a leader and a member works on a project. The leader allocates rewards among team members, including the leader, and a team member exerts effort to execute a project. We examine leaders’ optimal reward allocation strategies under different decision timings and outcome scenarios. Our model predicts that leaders face distinct trade-offs when making pre-project commitments versus post-outcome decisions. In the pre-project phase, leaders must balance the motivational benefits of committing to generous allocations against their personal incentives. In the post-outcome phase, particularly after negative results, leaders weigh reputation costs against immediate financial benefits when deciding how to demonstrate responsibility through their allocation choices.

The model generates several testable predictions: (1) leaders who can commit to reward allocations before project initiation should allocate less to themselves compared to those deciding after project completion, particularly when they are more altruistic, and (2) leaders should allocate less to themselves after negative

¹“CEO on why giving all employees minimum salary of \$70,000 still “works” six years later: “Our turnover rate was cut in half,” CBS News, July 14, 2016, <https://www.cbsnews.com/news/dan-price-gravity-payments-ceo-70000-employee-minimum-wage/> (accessed January 25, 2025).

²“CEOs Who Make One Dollar (Or Less) A Year,” Forbes, May 16, 2011, <https://www.forbes.com/sites/brendancoffey/2011/05/16/ceos-who-make-one-dollar-or-less-a-year/> (accessed January 25, 2025).

³“BP’s Hayward Won’t Get Performance Bonus,” CNN Money, March 3, 2011, https://money.cnn.com/2011/03/03/news/companies/bp_hayward_bonus/ (accessed January 25, 2025).

⁴“Former Volkswagen Chief Martin Winterkorn Could Receive €60m Payoff,” Wall Street Journal, September 24, 2015, <https://www.wsj.com/articles/former-volkswagen-chief-martin-winterkorn-could-receive-60m-payoff-1443103501> (accessed January 25, 2025).

⁵In this study, “accountability” is defined as the obligation to disclose and explain the causes and reasons for outcomes, regardless of whether they are positive or negative. This ensures that leaders maintain transparency in their actions and secure trust from both internal and external stakeholders. On the other hand, “responsibility” is conceived as a form of accountability, which clarifies ownership of specific outcomes. It involves identifying which individuals or groups are accountable for success or failure and entails corresponding actions or decisions. In our study, we particularly refer to decisions involving a reduction in the leader’s own share of remuneration when outcomes are negative compared to when they are positive. This can include adjustments in remuneration, changes in roles, or resignations if necessary.

outcomes are realized compared to positive outcomes, with this effect being stronger among those who are less altruistic. Our model further demonstrates that both leadership styles—generous commitment and responsible accountability—are moderated by how leaders perceive reputation costs differently across decision contexts. These theoretical predictions guide our experimental investigation.

Using a randomized controlled experiment with 520 participants, we empirically test these predictions by examining how leaders allocate rewards between themselves and team members under different timing and outcome conditions. Our experimental design distinguishes between four scenarios: pre-project decisions, post-project decisions, and decisions following either positive or negative outcomes. This approach allows us to examine both the strategic nature of commitment and the responsiveness to accountability in leadership behavior, directly testing our theoretical predictions.

Our experimental findings largely support the theoretical predictions while revealing additional insights. First, we find that female leaders tend to adopt more generous commitment styles, while no such tendency is observed among male leaders. Second, both male and female leaders demonstrate responsible accountability by reducing their self-allocation following negative outcomes, albeit through different psychological mechanisms. Male leaders appear to internalize responsibility by attributing poor outcomes to their own leadership inadequacy, while female leaders adjust their allocation decisions in response to external factors that shape their sense of responsibility.

Notably, our results highlight the crucial role of personality traits, particularly altruism, in moderating these leadership styles, consistent with our theoretical framework. More altruistic leaders show a stronger tendency toward generous commitment, while less altruistic leaders demonstrate stronger responsibility. Interestingly, traits traditionally associated with “strong” leadership—such as risk-taking and high career ambition—are often negatively related to such responsible allocation decisions. These findings provide empirical validation for our theoretical predictions about how personal characteristics influence leaders’ balancing of self-interest and team welfare.

This study contributes to the literature on team leadership in several ways. First, it provides a theoretical framework for understanding how timing and outcome information affect leaders’ reward allocation decisions. Second, it offers experimental evidence that validates and extends these theoretical predictions. Third, it identifies important gender differences in leadership approaches to generosity and responsibility, revealing distinct psychological mechanisms through which male and female leaders manifest these leadership styles. Finally, it demonstrates how personality traits and motivations moderate leadership behavior, providing deeper empirical insights into our theoretical framework.

Our findings have important implications for understanding how different types of leaders exhibit generous commitment and responsible accountability through reward allocation decisions. Organizations can use these insights in two key ways. First, in leader selection, our results indicate how leaders with different characteristics and gender respond to the need for motivational commitment and outcome-based accountability. Second, in leadership development programs, organizations can help leaders understand and develop their capacity for using reward allocation effectively, considering both generosity and responsibility aspects.

The remainder of this paper is organized as follows. Section 2 reviews relevant literature on leadership and reward allocation. Section 3 develops our theoretical framework and derives testable predictions. Section 4 describes our experimental design and methodology. Section 5 presents our empirical results and compares them with theoretical predictions. Section 6 discusses their implications and concludes with recommendations for future research and practice.

2 Related Literature

Research on reward allocation by leaders and the relationship between personality traits and leadership has been actively studied in both economics and management literature. Economists have primarily focused on how leaders can use reward allocation to solve incentive problems in teams, while management scholars have extensively examined how personal characteristics influence leadership behavior and decision-making. Our study builds upon and connects these two streams of literature.

Addressing free-rider problems has been central to research on team production, public goods provision, and common pool resource management. Various mechanisms have been investigated, including pre-play communication (Isaac and Walker, 1988), group incentive contracts (Nalbantian and Schotter, 1997), and mutual

monitoring (Ostrom et al., 1992). Recent experimental studies have specifically examined reward allocation by leaders as a solution, showing that it can increase team members’ effort and improve efficiency compared to equal sharing schemes (Van der Heijden et al., 2009; Stoddard et al., 2014; Drouvelis et al., 2017; Karakostas et al., 2023).

Most existing studies focus on scenarios where leaders make allocation decisions after observing members’ efforts, allowing them to reward high effort and punish shirking. While these studies demonstrate the effectiveness of ex-post reward allocation in solving the free-rider problem, they do not address how leaders might use pre-commitment strategically. A notable exception is Boosey et al. (2024), who examine leaders’ pre-commitment to specific sharing rules. Our study extends this literature in two important ways. First, we investigate both pre-commitment and post-outcome decisions, enabling analysis of how leaders use allocation decisions not only to motivate effort but also to demonstrate responsibility. Second, while previous research focuses primarily on efficiency implications, we examine how personal characteristics—particularly altruism and other traits affecting reputation cost perceptions—influence leaders’ strategic use of reward allocation to demonstrate different leadership styles.

2.1 Personality Traits and Leadership Effectiveness

The relationship between leadership styles and altruism has been studied from various perspectives. Rotemberg and Saloner (1993) theoretically demonstrate that empathic leaders tend to adopt more participatory styles, which prove particularly effective in innovative environments. Their emphasis on empathy’s role in leadership provides theoretical foundations for our focus on altruism as a direct moderator of allocation decisions. Kocher et al. (2013) experimentally show that managers’ other-regarding preferences influence their choice of management style, with efficiency-oriented managers favoring more autocratic approaches (Charness and Rabin, 2002).

The ethical dimension of leadership decisions has received considerable attention, particularly regarding responsibility-taking behavior (Den Hartog, 2015). De Hoogh and Den Hartog (2009) emphasize the importance of socially responsible power use, which includes leaders taking responsibility for both their own and their members’ actions. This view of responsibility in leadership is supported by Winter (1991), who analyzed AT&T’s sixteen-year longitudinal study of managers and found that those who combined high power motivation with high responsibility were more likely to succeed as managers. Our study extends this line of research by showing that both male and female leaders demonstrate responsibility by reducing their reward share after negative outcomes. However, we reveal distinct gender differences in the underlying psychological mechanisms: male leaders are primarily driven by internalized self-blame, while female leaders rely on other psychological processes to exhibit responsible leadership behavior.

The influence of personal characteristics on leadership has been extensively studied in management literature. Judge et al. (2002) examine how the Big Five personality factors relate to both leader emergence and effectiveness, identifying traits traditionally associated with “strong” leadership. Zaccaro et al. (2018) provide a comprehensive framework analyzing various leader individual differences. However, our findings challenge conventional wisdom by showing that traits typically associated with strong leadership—such as risk-taking and competitiveness—may actually be negatively related to responsible accountability. This suggests the need to reconsider how we identify and develop responsible leaders in organizations.

2.2 Gender Differences and Leadership Styles

In the leadership literature, the relationship between leadership styles and gender has been long studied (see Lord et al., 2017 for a historical review). Meta-analyses in management literature (Eagly and Johnson, 1990; Eagly et al., 2003) find that female leaders tend to adopt more participative styles and engage more actively in contingent reward behaviors. These findings align with our experimental results showing that female leaders demonstrate greater generosity through pre-project commitments, suggesting that gender differences in leadership styles manifest in reward allocation decisions.

Research on gender differences in leadership in economics has gained increasing prominence (Azmat and Petrongolo, 2014). Alan et al. (2020) document how gender gaps in leadership willingness emerge during adolescence, while earlier childhood shows no such differences. Chakraborty and Serra (2024) examine how potential backlash affects gender differences in leadership position self-selection, finding that women’s reluctance to take leadership roles emerges primarily when backlash is possible. These insights about backlash concerns help

interpret our findings that male and female leaders demonstrate responsibility through different mechanisms—male leaders internalizing responsibility by attributing poor outcomes to their own leadership inadequacy, while female leaders adjust their allocation decisions in response to external factors.

While previous research has primarily focused on either gender differences in leadership styles or the role of personal characteristics, we demonstrate how these factors interact in shaping both pre-project generosity and post-outcome responsibility and also reveal the distinct psychological mechanisms through which male and female leaders demonstrate these leadership behaviors.

3 Theoretical Framework

We first present our theoretical model and derive some predictions which are the basis for the hypothesis used in the experimental analysis.

We consider a one-shot team production game with two agents: a leader and a member, where a leader makes reward allocation decisions at different points in time and under varying information conditions. Our model incorporates three key features: (1) a leader has discretionary authority over the allocation of team rewards generated through the project, (2) a team member strategically chooses their effort levels in response to, or in anticipation of, these allocation decisions, and (3) a leader is characterized by both their degree of altruism toward the team member and their concerns about how their decisions affect their reputation among the team member and external observers.

3.1 Model Setup

We consider a team production with two agents: a leader and a member. The team works on a project that yields either a positive or negative outcome. Let $P \in [0, 1]$ denote the probability of achieving a positive outcome, which is determined by both agents' efforts:

$$P = e_l + e_m,$$

where $e_i \geq 0$, $i = \{l, m\}$, represents the effort levels of the leader and member, respectively.

For simplicity, we treat the leader's effort, e_l , as exogenously given, reflecting scenarios where managers oversee multiple projects and have already allocated their maximum available time to this team. The member, in contrast, chooses their effort level endogenously, incurring a quadratic cost of effort given by $c_m = (\mu e_m^2)/2$, where μ represents the cost parameter.

The team earns a total revenue of π_{pos} if the project outcome is positive and π_{neg} if it is negative, where $\pi_{pos} > \pi_{neg}$. We define $\Delta_\pi \equiv \pi_{pos} - \pi_{neg} > 0$ as the revenue gap. This revenue is divided between the leader and the member as rewards.

The leader has the authority to allocate the total revenue between themselves and the member. Let $x \in [0, 1]$ represent the share of the total revenue that the leader allocates to themselves (hereafter referred to as the allocation rule), with the remaining share $1 - x$ going to the member.

We consider four scenarios (cases) in which the leader makes the allocation decision:

1. *preProj*: before the project starts (before effort choices)
2. *postProj*: after effort choices but before outcome realization
3. *negOut*: after effort choices and the realization of a negative outcome
4. *posOut*: after effort choices and the realization of a positive outcome

The first two scenarios (*preProj* and *postProj*) differ in decision timing, while the latter two (*negOut* and *posOut*) differ in outcome information.

The member's utility, u_m , is defined by

$$u_m = (1 - x) \{P\pi_{pos} + (1 - P)\pi_{neg}\} - c_m.$$

The leader's utility, u_l , is defined by

$$u_l = x \{P\pi_{pos} + (1 - P)\pi_{neg}\} + \alpha u_m - c_l,$$

where c_l represents the leader's reputation cost:

$$c_l = \frac{\gamma x^2}{2}.$$

Here, $\gamma > 0$ is the reputation cost parameter, and $\alpha \in [0, 1]$ represents the leader's degree of altruism, indicating how much they internalize the member's utility.

In this model, the leader's effort level e_l is treated as fixed, and consequently, their direct effort cost is constant and omitted from the utility function. However, the leader faces a reputation cost associated with their share of the team reward x . A higher self-allocated share increases the leader's immediate monetary payoff but reduces their reputation.

3.2 Leadership Generosity

To examine how leaders demonstrate generosity through reward allocation decisions, we compare two distinct timing scenarios: pre-project decisions, where leaders can commit to allocation rules *before* the project starts, and post-project decisions, where they determine allocations *after* effort choices have been made.

3.2.1 Pre-project Decision

We first analyze a sequential game where the leader commits to a reward allocation rule, x , before the project starts (first stage), and then the member observes the share and chooses their effort (second stage). We solve this game by using backward induction.

In the second stage, the member chooses e_m to maximize their utility u_m after observing the leader's committed allocation rule, x . The first-order condition is given by⁶:

$$\frac{\partial u_m}{\partial e_m} = \Delta\pi(1-x) - \mu e_m = 0.$$

The best response of the member in the second stage, \hat{e}_m , is given as follows⁷

$$\hat{e}_m = \frac{\Delta\pi(1-x)}{\mu}, \quad (1)$$

which decreases with their effort cost μ and the leader's share x . Notice that a higher share for the leader reduces the member's incentive to exert effort; we refer to this as the demotivating effect of x .

In the first stage, the leader determines x to maximize their utility while considering the member's optimal response \hat{e}_m . Using the envelope theorem, the first-order condition for the optimal leader's share is⁸:

$$\frac{du_l}{dx_l} = (1-\alpha)(P\Delta\pi + \pi_{neg}) - \frac{\Delta\pi x}{\mu} - \gamma x = 0.$$

Solving this yields the equilibrium share in *preProj* case⁹:

$$x^{pre} = (1-\alpha) \frac{\mu(\Delta\pi e_l + \pi_{neg}) + \Delta\pi^2}{\gamma\mu + \Delta\pi^2(2-\alpha)}, \quad (2)$$

where superscript *pre* indicates the equilibrium value in the Subgame Perfect Nash Equilibrium (SPNE) of the *preProj* case. Then, we have:

$$\frac{\partial x^{pre}}{\partial \alpha} = - \frac{(\gamma\mu + \Delta\pi^2) \{(\Delta\pi e_l + \pi_{neg})\mu + \Delta\pi^2\}}{\{\gamma\mu + \Delta\pi^2(2-\alpha)\}^2} < 0,$$

⁶The second-order condition (SOC) is satisfied: $\partial^2 u_m / \partial e_m^2 = -\mu < 0$.

⁷We assume μ is so large that the member's optimal effort is less than 1.

⁸The SOC is satisfied:

$$\frac{d^2 u_l}{dx^2} = - \frac{\Delta\pi^2(1-\alpha)}{\mu} - \gamma < 0.$$

⁹We assume γ is so large that the equilibrium share is less than 1.

which implies that a more altruistic leader commits to a lower share of rewards for themselves.

In the SPNE of the *preProj* case, the member's equilibrium effort level is given by:

$$e_m^{pre} = \frac{\Delta_\pi}{\mu} (1 - x^{pre}) = \frac{\Delta_\pi}{\mu} \frac{\gamma\mu - \mu(1 - \alpha)(\Delta_\pi e_l + \pi_{neg}) + \Delta_\pi^2}{\gamma\mu + \Delta_\pi^2(2 - \alpha)}, \quad (3)$$

which is increasing in α , implying that a more altruistic leader, by committing to a larger share of rewards for the member, induces greater effort from the member.

3.2.2 Post-project Decision

We next consider a sequential game where a member chooses their effort in the first stage, and then the leader observes their effort and decides a reward allocation rule in the second stage. We solve this game by using backward induction.

The first-order condition for the leader's allocation decision in the second stage is given by¹⁰

$$\frac{\partial u_l}{\partial x} = (1 - \alpha)(P \Delta_\pi + \pi_{neg}) - \gamma x = 0,$$

which yields the best response of the leader, \tilde{x} , given by

$$\tilde{x} = \frac{(1 - \alpha) \{ \Delta_\pi (e_l + e_m) + \pi_{neg} \}}{\gamma}. \quad (4)$$

Notably, in this case, the leader's allocation *increases* with the member's effort e_m , creating a disincentive for member's effort provision: members anticipate that working harder will lead to a smaller share of the rewards. This time-inconsistency problem is at the heart of why pre-commitment can be valuable. As we will show later, this contributes to lower team performance in *postProj* case.

In the first stage, the member anticipates how their effort choice will influence the leader's subsequent allocation decision \tilde{x} . The first-order condition for the member's effort choice is given by¹¹:

$$\frac{du_m}{de_m} = - \frac{\Delta_\pi \{ \Delta_\pi (e_l + e_m) + \pi_{neg} \} (1 - \alpha)}{\gamma} + \Delta_\pi (1 - \tilde{x}) - \mu e_m = 0.$$

Solving this game yields the equilibrium share and the equilibrium effort in the *postProj* case:

$$x^{post} = (1 - \alpha) \frac{\mu(\Delta_\pi e_l + \pi_{neg}) + \Delta_\pi^2}{\gamma\mu + \Delta_\pi^2(2 - 2\alpha)}, \quad (5)$$

$$e_m^{post} = \frac{\Delta_\pi}{\mu} \frac{\gamma\mu - 2\mu(1 - \alpha)(\Delta_\pi e_l + \pi_{neg})}{\gamma\mu + \Delta_\pi^2(2 - 2\alpha)}, \quad (6)$$

where superscript *post* indicates the equilibrium value in the SPNE of the *postProj* case.

Since

$$\frac{\partial x^{post}}{\partial \alpha} = - \frac{\gamma\mu \{ (\Delta_\pi e_l + \pi_{neg}) \mu + \Delta_\pi^2 \}}{\{ \gamma\mu + \Delta_\pi^2(2 - 2\alpha) \}^2} < 0,$$

it follows that a more altruistic leader chooses a lower share of rewards for themselves.

3.2.3 Comparison and Predictions

Now, we compare the equilibrium allocation rules and the member's effort between the two scenarios.

From (2) and (5), we have:

$$x^{pre} - x^{post} = - \frac{\alpha(1 - \alpha)\Delta_\pi^2 \{ \Delta_\pi^2 + \mu(\Delta_\pi e_l + \pi_{neg}) \}}{\{ \gamma\mu + (2 - \alpha)\Delta_\pi^2 \} \{ \gamma\mu + (2 - 2\alpha)\Delta_\pi^2 \}} \leq 0$$

¹⁰The SOC is satisfied because $\frac{\partial^2 u_l}{\partial x^2} = -\gamma < 0$.

¹¹The SOC is satisfied because $\frac{d^2 u_m}{de_m^2} = - \frac{2\Delta_\pi^2(1 - \alpha)}{\gamma} - \mu < 0$.

hold for all $\alpha \in [0, 1]$ with equality iff $\alpha = 0$ and $\alpha = 1$. Similarly, we have:

$$e_m^{pre} - e_m^{post} = \frac{(1 - \alpha)(\gamma\mu + 2\Delta_\pi^2) \{ \mu(\Delta_\pi e_l + \pi_{neg}) + \Delta_\pi^2 \}}{\mu \{ \gamma\mu + (2 - \alpha)\Delta_\pi^2 \} \{ \gamma\mu + (2 - 2\alpha)\Delta_\pi^2 \}} \geq 0$$

hold for all $\alpha \in [0, 1]$ with equality iff $\alpha = 1$. Therefore, we have the following result:

Result 1 (Leadership Generosity). $x^{pre} \leq x^{post}$ with equality iff $\alpha = 0$ and $\alpha = 1$.

This result, which forms the basis for our first testable hypothesis (H1), demonstrates leadership through generosity: when leaders can commit to reward allocations before the project starts, they choose more generous allocations (i.e., lower x) compared to post-project decisions. This generous commitment serves as a strategic tool for leaders to motivate higher member effort, as reflected in the consistently higher effort levels in the pre-project scenario ($e_m^{pre} > e_m^{post}$ for all $\alpha \in [0, 1)$, even when $x^{pre} = x^{post}$ at $\alpha = 0$).

The intuition behind this result can be understood by comparing the marginal benefits of x in the pre-project and post-project scenarios (denoted by MB_x). Specifically, we have:

$$MB_x|_{pre} - MB_x|_{post} = \left\{ \underbrace{(1 - \alpha)(e_m^{pre} - e_m^{post})}_{(a)} + \underbrace{\frac{d\hat{e}_m}{dx^{pre}} x^{pre}}_{(b)} \right\} \Delta_\pi$$

Here, (a) represents the direct marginal gain of pre-project x (over post-project x) due to differences in the member's effort, while (b) denotes the indirect marginal loss of pre-project x (over post-project x) due to the demotivating effect on the member's effort. Note that the direct effect (a) is discounted by the leader's altruism, while the indirect effect (b) is determined during the decision-making process, with the leader's altruistic concerns already incorporated.

When $\alpha = 0$ (no altruism), the altruistic discount disappears, leaving the direct effect purely as the difference in the member's effort between the two scenarios, which aligns perfectly with the demotivating effect on the member's effort in the pre-project scenario. When $\alpha \in (0, 1)$, the altruistic discount reduces the direct marginal gain (a), resulting in $x^{pre} < x^{post}$. Eventually, when $\alpha = 1$ (complete altruism), the leader's utility is equally weighted between their own benefits and the member's benefits, leading the leader to allocate all rewards to the member (i.e., $x^{pre} = x^{post} = 0$) to minimize reputation costs and maximize overall team utility. Panel (a) of Figure 1 illustrates this relationship between the leader's altruism and the equilibrium allocation rule.

It is important to note that these theoretical predictions serve as benchmark results, assuming identical parameters across *preProj* and *postProj* scenarios. In reality, parameters may differ between these scenarios. For instance, the reputation cost parameter γ could differ between scenarios even when leaders choose identical reward allocations. The reputation cost associated with higher self-allocation might be lower in pre-project decisions due to greater member acceptance, compared to decisions made after team production. This difference in reputation costs likely stems from members' expectations that leaders should establish clear reward rules at the project's outset.

Figure 1 illustrates how equilibrium self-allocation patterns differ under varying assumptions about reputation costs. Panel (a) depicts the case where reputation costs are identical across scenarios, clearly demonstrating leaders' strategic use of generosity: they consistently choose lower self-allocation in pre-project decisions for all altruism levels $\alpha \in (0, 1)$. In contrast, panel (b) shows how patterns change when reputation costs are lower for pre-project decisions. Here, we observe higher pre-project self-allocation when altruism is low, but lower pre-project self-allocation when altruism is high. This varying pattern, combined with potential differences in other parameters across scenarios, suggests that the relationship between commitment ability and generous allocation is theoretically ambiguous, highlighting the importance of empirical investigation.

3.3 Leadership Responsibility

To examine how leaders demonstrate responsibility in their reward allocation decisions, we compare two post-outcome scenarios where leaders make decisions after either positive or negative project outcomes are realized: the *negOut* and *posOut* scenarios. This comparison allows us to analyze whether and how leaders demonstrate responsibility by accepting responsibility through reward allocation, particularly focusing on their willingness to reduce their share following negative results.

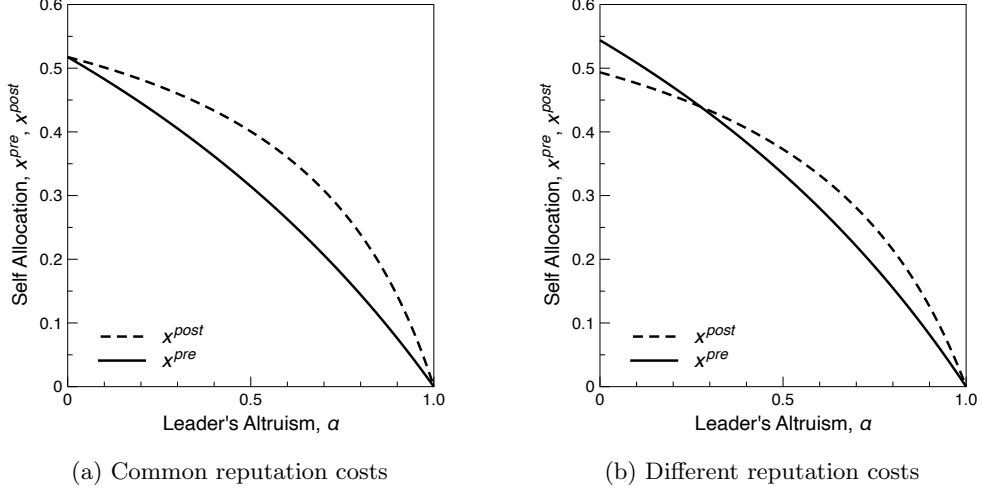


Figure 1: Equilibrium Reward Allocation for Pre- and Post-Project Decision

Note: Both panels show the relationship between leader's altruism (α) and equilibrium self-allocation (x). Parameters are set at $\pi_{pos} = 6$, $\pi_{neg} = 0.6$, $e_l = 0.2$ and $\mu = 8$, with $e_l + e_m^{pre} < 1$ and $e_l + e_m^{post} < 1$ maintained throughout. Panel (a) assumes equal reputation cost parameter ($\gamma = 3$) across both scenarios, while panel (b) introduces different values of the reputation cost parameter γ (2.5 versus 3.5 for pre- and post-project decisions, respectively).

Unlike in the *preProj* and *postProj* scenarios where we considered strategic interactions between the leader and member, here we focus solely on the leader's allocation decisions after project completion and outcome realization, abstracting from strategic aspects for simplicity.

For each project outcome $j = \{neg, pos\}$, the first-order condition for the leader's allocation decision yields:

$$x^j = \frac{\pi_j(1 - \alpha)}{\gamma}.$$

Given that $\pi_{neg} < \pi_{pos}$, we obtain the following result:

Result 2 (Leadership Responsibility). $x^{neg} \leq x^{pos}$ with equality iff $\alpha = 1$.

This result, which forms the basis for our second testable hypothesis (H2), demonstrates leadership through responsibility: when leaders face negative project outcomes, they demonstrate responsibility by allocating less to themselves compared to positive outcome scenarios.

The intuition is fairly straightforward: when project outcomes are negative, the smaller total reward decreases the marginal utility of the leader's self-allocation share. Moreover, the diminished performance increases the relative magnitude of reputation risk of claiming a larger share, thus motivating leaders to allocate less rewards to themselves.

Furthermore, we have:

$$\frac{\partial(x^{pos} - x^{neg})}{\partial\alpha} = -\frac{\Delta\pi}{\gamma} < 0, \quad (7)$$

which implies that the difference in allocation shares between positive and negative outcomes decreases with the leader's degree of altruism. The result indicates that less altruistic leaders (those with lower α) demonstrate greater responsibility by reducing their share more substantially following negative outcomes compared to positive ones. This prediction aligns with our subsequent experimental findings, suggesting that personal characteristics, particularly altruism, play a crucial role in how leaders take responsibility for negative outcomes through their allocation decisions.

The reputation cost parameter γ in our model may vary depending on project outcomes. When allocating rewards following negative outcomes, leaders likely face higher reputation costs compared to positive outcomes, as

their decisions come under greater scrutiny in challenging situations. This higher γ in negative outcome scenarios leads to a lower self-allocation compared to positive outcomes, reinforcing leaders’ tendency to demonstrate responsibility through reduced self-allocation when teams face setbacks.

Moreover, the magnitude of this difference in reputation costs between negative and positive outcomes may vary systematically with leaders’ personal characteristics. Risk-averse leaders may anticipate a larger difference in reputation costs between positive and negative outcomes, expecting more severe reputational consequences following team failures. Similarly, leaders who are less greedy or those who are less optimistic about future opportunities might perceive a greater gap in the reputational implications of their allocation decisions across different outcomes. These theoretical predictions about how personality traits shape leaders’ decisions to demonstrate responsibility—as we will demonstrate through our experimental analysis—suggest that individual characteristics play a crucial role in how leaders demonstrate responsibility through their allocation decisions following different project outcomes.

These theoretical predictions guide our experimental investigation in several important ways. First, they suggest that we should observe systematic differences in allocation decisions based on both timing (H1) and outcome information (H2). Second, they indicate that these leadership styles—generous and responsible leadership—may be moderated by leaders’ personality traits: directly through altruism, and indirectly through other traits that shape leaders’ perceptions of situation-dependent reputation costs. To test these predictions and explore the underlying mechanisms of leadership behavior, we conducted a randomized controlled experiment, which we describe in the following section.

4 Experimental Design and Methods

Our theoretical framework developed in the previous section provides clear predictions about how leaders’ reward allocation decisions are influenced by timing and outcome information. To test these theoretical predictions, we conducted a randomized controlled experiment with scenario-based survey methods. This section presents our hypotheses and experimental design.

4.1 Main Hypotheses

Building directly on our theoretical framework developed in Section 3, we formulate two testable hypotheses that guide our experimental investigation:

Hypothesis 1 (Leadership Generosity). *Leaders who decide on the reward allocation before the project starts will allocate a smaller percentage of rewards to themselves, hence a larger share to their team members, compared to those making the decision after project completion.*

This hypothesis emerges directly from our theoretical analysis, $x^{pre} \leq x^{post}$ showing that leaders choose more generous allocations when they can commit before the project starts.

Hypothesis 2 (Leadership Responsibility). *Leaders informed of more negative project outcomes are hypothesized to allocate a smaller percentage of rewards to themselves, thus a larger share to their team members, relative to those informed of more positive outcomes.*

This hypothesis emerges directly from our theoretical analysis, $x^{neg} \leq x^{pos}$, showing that leaders reduce their self-allocation following negative outcomes compared to positive outcomes, reflecting their sense of responsibility for team performance.

4.2 Exploratory Analyses

In addition to testing our main hypotheses (H1 and H2), we conduct several exploratory analyses to further understand the complexities and underlying factors of leadership decision-making in reward allocation.

1. Moderation Effects of Personal Characteristics (E1a, E2a): We explore how individual characteristics, including gender, occupation, and personality traits, may moderate the effect of leadership generosity (H1) or leadership responsibility (H2).

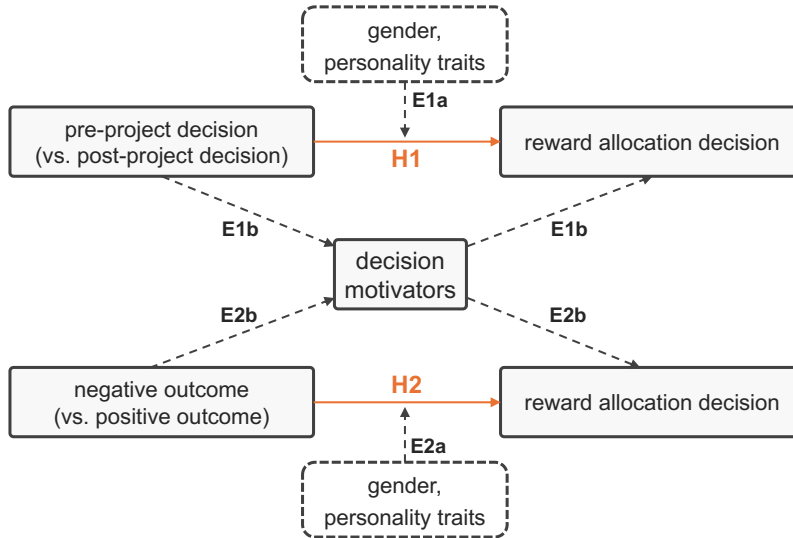


Figure 2: Conceptual model of hypothesized relationships and exploratory analyses

Note: H1 and H2 represent main hypotheses (solid lines), while E1a, E2a, E1b, and E2b represent exploratory analyses (dashed lines). E1a and E2a examine whether gender and personality traits moderate the relationships between pre-project (vs post-project) decision and reward allocation (H1), and between negative (vs positive) outcome and reward allocation (H2), respectively. In contrast, E1b and E2b explore whether decision motivators mediate these relationships.

2. Mediation through Decision Motivators (E1b, E2b): We investigate how decision motivators mediate the effect of leadership generosity (H1) or leadership responsibility (H2). These motivators include the desire to motivate team members, concern for social image, self-benefit, member benefit, and the perceived importance of leader effort relative to team members' efforts.

Our exploratory analyses examine which types of leaders demonstrate generosity and responsibility (E1a and E2a) and through what psychological mechanisms they do so (E1b and E2b). Regarding the moderation effects, this focus stems directly from our theoretical framework: the model explicitly incorporates altruism as a direct moderator of allocation decisions and suggests other personality traits may operate through their influence on reputation cost perceptions. These analyses serve three purposes: (1) to empirically validate these theoretical channels, (2) to understand the psychological mechanisms driving allocation decisions, and (3) to generate new insights for future theoretical development by examining a broader set of individual characteristics. Figure 2 presents our conceptual framework, illustrating both the main hypothesized relationships and the exploratory analyses (E1a, E1b, E2a, E2b).

4.3 Experimental Design

The experiment employed a RCT design with scenario-based experiments to investigate the decision-making processes of team leaders in reward allocation. The design consists of four treatment conditions that vary both the timing of allocation decisions and the information about project outcomes, allowing us to test our hypotheses about leadership generosity and responsibility separately.

4.3.1 Registration and Ethical Approval

The experiment was preregistered with the American Economic Association RCT Registry (AEARCTR-0012554). This preregistration process ensures the scientific rigor and transparency of the research design before the commencement of data collection. Furthermore, the experiment received approval from the Research Ethics Committee of Aoyama Gakuin University, Japan, with the approval ID: 23-NR-004. The study was conducted in strict adherence to the university's ethical guidelines, particularly focusing on ensuring participants' anonymity to uphold the integrity of the research process.

4.3.2 Participants and Recruitment

Participants were recruited through a reputable Japanese online survey company, targeting employed individuals aged 20 to 60. The data collection process took place from December 11 to December 19, 2023, yielding a total of 1,783 responses. However, only 520 responses were deemed valid, resulting in a valid response rate of 29.16%.

The stringent validation process primarily involved two screening criteria. First, we excluded responses from students, unemployed individuals, and housewives/househusbands, as our study focuses on leadership in professional settings. Second, an attention check ensured data reliability by excluding participants who failed to recall key scenario details. This relatively strict screening process was essential to ensure the quality and reliability of our data, particularly given the complexity of our experimental scenarios and the importance of participants' ability to fully engage with the leadership role. See Table A1 in Appendix A for a description of variables and survey questions, and Appendix B for the English translation of the actual survey interface.

In line with our pre-registered plan, we instructed the survey company to stop data collection upon reaching the target sample size of $N = 520$. This approach ensured that the selection process remained unbiased and maintained the integrity of our experimental design.

The final sample ($N = 520$) had equal gender distribution (50% male), with ages ranging from 20 to 60 (mean = 39.36, SD = 10.82). See Appendix A, Table A1, for the age distribution.

Participants were randomly assigned to one of four intervention groups, with each group consisting of 130 individuals. This balanced distribution across groups was crucial for our experimental design and subsequent analysis.

As an incentive for participation, respondents received a monetary reward of 8 to 10 Japanese yen (approximately 5 to 7 US cents) upon completing the survey. The experiment consisted of 8 major questions, comprising a total of 24 to 25 sub-questions (varying slightly by group), and was designed to be completed in approximately 3 to 5 minutes.

4.3.3 Experimental Conditions

The experiment employed a 4-arm randomized controlled trial design, where participants were randomly assigned to one of four scenario-based intervention groups:

- Pre-Project Decision condition (*preProj*)
- Post-Project Decision condition (*postProj*)
- Negative Outcome condition (*negOut*)
- Positive Outcome condition (*posOut*)

To test Hypothesis 1 (H1) on leadership generosity and conduct related exploratory analyses, we compared the Pre-Project and Post-Project Decision conditions, using a dummy variable *preProj*, where *preProj* = 0 represents the Post-Project Decision condition and *preProj* = 1 represents the Pre-Project Decision condition.

For Hypothesis 2 (H2) on leadership responsibility and its associated exploratory analyses, we examined differences between the Positive Outcome and Negative Outcome conditions, , where *negOut* = 0 represents the Positive Outcome condition and *negOut* = 1 represents the Negative Outcome condition.

4.3.4 Procedure

Our survey experiment employed four distinct scenarios to investigate the behavior of participants acting as team leaders with the authority to decide on reward allocation among project members. The actual questionnaires used in the study are provided in Appendix B (English translation) and Appendix C (original Japanese version) for reference.

The experiment proceeded as follows:

1. Demographic Information: Participants first answered questions regarding their gender, age, and occupation. These variables were later used as either control or moderation variables when testing the intervention effects. Participants who fell outside the target age range or did not have a profession were concluded at this point and received a designated reward.

2. Personality Traits Assessment: These traits included altruism, optimism, risk tolerance, trust in others, job satisfaction, career ambition, conscientiousness (as part of the Big Five personality traits), competitiveness, sincerity, fairness, modesty, and greed avoidance.¹² These 12 responses formed the Personality Traits variables.
3. Common Scenario Introduction: Participants read an introductory text presenting a common hypothetical scenario:

You are the leader of a three-member team, including yourself, at your job and you are about to embark on a new team project. As the leader, not only are you advancing the project, but you are also entrusted with the most responsible roles, such as the overall management of the team's work, member motivation management, and decision-making for the allocation of rewards. If everyone in the team puts in more effort, the project can generate larger profits. With maximum effort from everyone, the project could yield a profit of up to 6 million yen (approximately 40,000 US dollars), but with inadequate effort, it might only produce a minimum of 600,000 yen (approximately 4,000 US dollars).

4. Condition-Specific Scenarios: Following the common scenario, participants were randomly assigned to one of four intervention groups, each presented with a unique scenario (with bold text indicating the same emphasis shown to participants in the actual survey):

- a) For Pre-Project Decision condition (*preProj*):

Now, **at the meeting before the start of this project**, you are about to declare in front of the two members how the profits expected from this project will be divided as rewards between yourself and the two members.

- b) For Post-Project Uncertainty condition (*postProj*):

Now, **the project period has ended**, and all that is left is to wait and see how much profit the project will generate. At the meeting, you are about to declare in front of the two members how the profits expected from this project will be divided as rewards between yourself and the two members.

- c) For Negative Outcome condition (*negOut*):

Now, **unfortunately, the project has ended with the worst possible outcome**, generating a profit of only 600,000 yen. At the final meeting, you are about to declare in front of the two members how the profits earned from this project will be divided as rewards between yourself and the two members.

- d) For Positive Outcome condition (*posOut*):

Now, **the project has ended with the best possible outcome**, generating a profit of 6 million yen. At the final meeting, you are about to declare in front of the two members how the profits earned from this project will be divided as rewards between yourself and the two members.

5. Decision-Making Task: Participants were then asked to make a decision about reward allocation between themselves and their team members, specifying the percentage of total rewards they would allocate to themselves (variable: *selfAllocation*)¹³:

¹²Additionally, for both risk-taking and altruism, participants answered one supplementary question each. These questions presented hypothetical scenarios designed to quantify these traits on a ratio scale. The risk-taking question assessed Willingness-To-Bet (WTB) for a lottery ticket, while the altruism question measured Willingness-To-Donate in a disaster relief situation. This approach provided a more precise measurement of these characteristics compared to the Likert scale items.

¹³Participants were instructed to specify only the percentage (%) of the total rewards that they would allocate to themselves as the leader, choosing a value between 0 and 100. To ensure clarity and prevent misunderstandings, the interface was designed to automatically display the corresponding monetary amount for the leader, the per-member allocation, and its percentage of the total rewards as soon as the participant entered a value. This real-time feedback allowed participants to make informed decisions without ambiguity.

As the leader of this team, what do you think you would decide for your own reward, as well as the rewards for the members, and how would you announce this in front of the members at this meeting? Please specify the percentage of the total rewards that you would take for yourself, between 0 to 100.

6. Attention Check: Participants identified the timing of their reward allocation decision. Those who answered incorrectly or did not remember were excluded, ensuring they understood their assigned condition.¹⁴
7. Decision Motivators: After the allocation decision, participants responded to questions assessing their decision motives and perceptions. These included Self-Allocation Reasons: to enhance their social image (*socialImage*), to motivate team members (*motivateMember*; pre-project condition only), to secure personal benefits (*selfBenefit*), and to benefit team members (*memberBenefit*). Additionally, participants rated the relative importance of leader versus member efforts for project outcomes (*leadImp*). These Decision Motivator variables were used in exploratory analyses to examine their mediating role in the effects of leadership generosity and responsibility (E1b and E2b).

The percentage of total rewards allocated to themselves by the leader (*selfAllocation*) serves as the primary dependent variable, which corresponds to x in the theoretical model. Our main analytical focus is twofold: first, comparing reward allocation decisions made before vs after project (*preProj* vs *postProj* groups), and second, comparing decisions made with known project outcomes (*negOut* vs *posOut* groups). This approach allows us to examine how the timing of decision-making and the knowledge of outcomes influence leaders' allocation choices.

All statistical analyses were conducted using STATA/SE 18.0, with a significance level set at $p < .05$.

5 Results

5.1 Preliminary Analyses

Prior to analysis, we prepared the data by reverse-coding several personality trait items (*big5Consc1*, *fairness*, *modesty*, *greedAvoid*) for consistency in measurement direction. Additionally, we computed a composite measure of conscientiousness (*big5Consc*) by averaging the reversed *big5Consc1* and the original *big5Consc2*. Summary statistics, including means and standard deviations across conditions, are presented in Table A2 in Appendix.

Balance checks (Table A3) confirmed successful randomization, as no significant differences were found in personality traits between *preProj* and *postProj* or between *negOut* and *posOut* (all p -values $> .05$). However, some occupational categories had very few participants in certain conditions, leading to significant differences (e.g., executives, $p = .04$). To address this, we recategorized occupations into five broader groups: *regularStaff*, *managerialStaff*, *publicServant*, *partTime*, and *otherOccupations* (the latter including all low-frequency categories). After recategorization, occupational distributions no longer differed significantly across conditions.

To ensure the independence of personality trait measures, we examined polychoric correlations and found that all coefficients remained below 0.7, indicating no multicollinearity concerns and suggesting that these variables measure distinct personality traits (Shrestha, 2020). Correlation matrices for the full sample, male sample, and female sample are provided in Appendix Tables A4, A5, and A6.¹⁵

5.2 Testing Main Hypotheses

Our main analysis focuses on testing two key hypotheses, H1 and H2. Figure 3 presents the mean self-allocation percentages across experimental conditions for the full sample (left panel) and separately by gender (middle and right panels). This figure reveals distinct gender differences in reward allocation decisions.¹⁶ Additionally,

¹⁴Participants could not use a “back” function to review the scenario when answering this question.

¹⁵Moreover, our Likert-scale measures of altruism and risk-taking correlated significantly with standard economic measures—willingness to donate (*WTD*) and willingness to bet (*WTB*), respectively—validating them as reliable proxies for economic preferences. Specifically, *altruism* showed a significant positive correlation with *WTD* (Spearman's $\rho = 0.29$, $p < .001$), while risk-taking was positively correlated with *WTB* ($\rho = 0.16$, $p < .001$).

¹⁶Appendix Table A2 presents histograms of *selfAllocation* across experimental conditions, providing a detailed distribution of our main outcome variable.

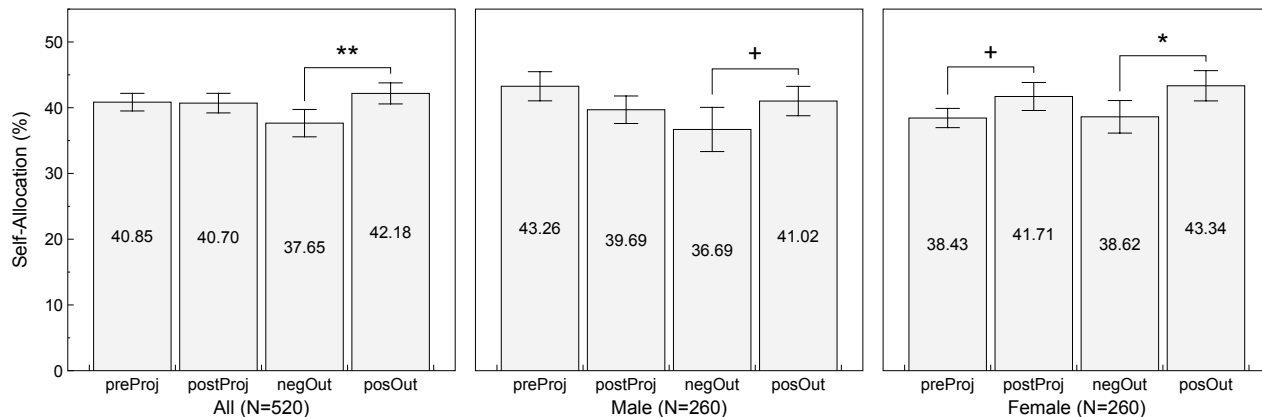


Figure 3: Mean self-allocation percentages across experimental conditions

Note: Experimental conditions—preProj (pre-project decision), postProj (post-project decision), negOut (negative outcome), and posOut (positive outcome). Due to the non-normal distribution of self-allocation across all conditions (confirmed by Shapiro-Wilk tests, $ps < .01$), Mann-Whitney U tests were used for statistical comparisons. Error bars indicate standard errors. $^+p < .10$, $*p < .05$, $**p < .01$.

Table 1 presents the regression results for these tests, using both OLS and robust regression methods, with and without controls for demographic and personality traits.

5.2.1 Leadership Generosity (H1)

Hypothesis 1 posited that leaders who can decide on the reward allocation before the project starts will allocate a smaller percentage of rewards to themselves, compared to those making the decision post-project decision condition. To test this hypothesis, we first conducted non-parametric comparisons between conditions, followed by regression analyses.

Given that Shapiro-Wilk tests indicated non-normal distributions of self-allocation across all conditions (all p -values $< .01$), we employed Mann-Whitney U tests for our initial comparisons. For the full sample, self-allocation levels were similar between *preProj* ($M = 40.85$, $SD = 15.27$) and *postProj* ($M = 40.70$, $SD = 17.00$) conditions ($p = .65$, $r = 0.03$). Gender-specific analyses revealed varying patterns: male leaders showed no systematic differences in self-allocation between *preProj* ($M = 43.26$, $SD = 17.86$) and *postProj* ($M = 39.69$, $SD = 16.88$) conditions ($p = .30$, $r = 0.09$), while female leaders demonstrated a marginally significant tendency to allocate less to themselves in *preProj* ($M = 38.43$, $SD = 11.80$) compared to *postProj* ($M = 41.71$, $SD = 17.18$) conditions ($p = .06$, $r = 0.16$). These initial results provide limited support for H1 in simple comparisons. However, to account for potential confounding factors and to examine the effects more rigorously, we conducted regression analyses, as shown in Panel A of Table 1.

Our regression results reveal partial support for H1 with notable gender differences. For female leaders, we find partial support for H1. The coefficient for the *preProj* is consistently negative across all specifications, indicating that female leaders tend to allocate less to themselves in pre-project decisions compared to post-project decisions. This effect is statistically significant in the robust regression models with both basic control ($b = -3.94$, $p < .05$) and full control ($b = -4.18$, $p < .05$). These results suggest that female leaders tend to make more generous allocations to team members when deciding before the project starts, possibly as a strategy to motivate their team.

In contrast, for male leaders, we observe a positive coefficient for the *preProj* across all specifications, although these effects are not statistically significant ($ps > .10$). This trend, while not significant, suggests that male leaders might allocate more to themselves in pre-project decisions, contrary to our hypothesis.

These divergent patterns between male and female leaders highlight the importance of considering gender differences in leadership behaviors and decision-making processes. While female leaders show a tendency aligned with our generosity hypothesis, male leaders do not exhibit a clear pattern in this regard.

Table 1: Regression Results for Self-Allocation

	OLS				Robust Regression			
	Basic Controls		Full Controls		Basic Controls		Full Controls	
	Male	Female	Male	Female	Male	Female	Male	Female
Panel A: Testing H1 (Leadership Generosity)								
<i>preProj</i>	3.75	-4.43	4.04	-4.06	3.75	-3.94*	3.54	-4.18*
(vs <i>postProj</i>)	(3.08)	(2.73)	(3.25)	(2.78)	(3.08)	(1.85)	(2.42)	(1.95)
prob> <i>F</i>	0.66	0.12	0.44	0.14	0.66	0.13	0.71	0.60
N	130	130	130	130	130	130	130	130
Panel B: Testing H2 (Leadership Responsibility)								
<i>negOut</i>	-4.41	-5.21 ⁺	-2.64	-6.06 ⁺	-5.99 ⁺	-6.97**	-4.99	-7.18**
(vs <i>posOut</i>)	(4.16)	(3.14)	(4.40)	(3.25)	(3.11)	(2.42)	(3.40)	(2.71)
prob> <i>F</i>	0.18	0.38	0.13	0.14	0.31	0.02	0.04	0.53
N	130	130	130	130	130	130	130	130
Job Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Personality Traits	No	No	Yes	Yes	No	No	Yes	Yes

Note: Robust standard errors in parentheses. Basic Controls include age and job categories. Full Controls additionally include personality traits. ⁺ $p < .10$, * $p < .05$, ** $p < .01$.

These findings partially align with our theoretical predictions, though with important nuances. Our model predicted that leaders would generally allocate less to themselves in pre-project decisions compared to post-project decisions ($x^{pre} < x^{post}$), anticipating the motivational benefits of pre-commitment. However, the empirical results reveal that this effect manifests primarily among female leaders, while male leaders show no significant pre-project reduction in self-allocation. This gender-specific pattern may be driven by systematic differences in personality traits between male and female leaders—a possibility we explore in detail through moderation analysis in Section 5.3.1.

5.2.2 Leadership Responsibility (H2)

Hypothesis 2 proposed that leaders informed of poor project outcomes would allocate a smaller percentage of rewards to themselves, compared to those informed of better outcomes. To test this hypothesis, we first conducted non-parametric comparisons between conditions, followed by regression analyses.

As in the *preProj* vs *postProj* comparisons for H1, we employed Mann-Whitney U tests for our initial comparisons. For the overall sample, we found that leaders allocated significantly less to themselves in *negOut* (M = 37.65, SD = 23.73) compared to *posOut* (M = 42.18, SD = 18.26) conditions ($p = .005$, $r = 0.17$). Gender-specific analyses revealed consistent patterns: male leaders showed a marginally significant tendency to reduce self-allocation in *negOut* (M = 36.70, SD = 27.11) compared to *posOut* (M = 41.02, SD = 18.02) conditions ($p = .07$, $r = 0.16$), while female leaders demonstrated a significant reduction in self-allocation in *negOut* (M = 38.62, SD = 19.95) compared to *posOut* (M = 43.34, SD = 18.56) conditions ($p = .013$, $r = 0.21$). These initial results provide substantial support for H2.

Our regression results, shown in Panel B of Table 1, provide robust support for H2, revealing notable gender differences in how leaders demonstrate responsibility.

We observe negative coefficients for the *negOut* variable across all specifications for both male and female leaders, consistent with the non-parametric test results and supporting our hypothesis. However, the statistical significance and magnitude of these effects vary systematically by gender. For male leaders, the effect is not statistically significant in any of the models. However, in the robust regression model with basic controls, the effect is marginally significant ($b = -5.99$, $p < .10$), and the magnitude of the effect is substantial: the coefficient indicates that male leaders allocate 2.64 to 5.99 percentage points less to themselves in negative outcome

scenarios compared to positive outcomes.¹⁷ Female leaders, on the other hand, show a more pronounced and statistically significant effect, particularly in the robust regression models. In the full control model with robust regression, female leaders allocate 7.18 percentage points less to themselves in the negative outcome scenario ($p < .01$). This effect is consistent and significant across different specifications.

In conclusion, our findings provide support for H2, especially for female leaders, highlighting the importance of considering both gender and outcome information in understanding leadership decision-making in reward allocation contexts.

These findings broadly support our theoretical predictions, albeit with some gender differences. Our model predicted that leaders would allocate less to themselves following negative outcomes compared to positive outcomes ($x^{neg} < x^{pos}$). This pattern is observed in our data, with the effect being statistically significant for female leaders and directionally consistent but not significant for male leaders. The weaker support for our prediction among male leaders may stem from various factors, including systematic gender differences in personality traits or distinct psychological pathways through which male leaders process and respond to negative outcomes, which will be clarified in later sections.

5.3 Moderating Roles of Individual Characteristics

To investigate how individual characteristics—such as personality traits, occupation, and age—moderate the relationship between experimental conditions and self-allocation decisions, we conducted regression analyses including interaction terms between the experimental condition and these characteristics.

To further interpret significant interactions involving personality traits, we performed simple slope analyses. Specifically, we examined the relationship between decision timing and self-allocation at levels of personality traits one standard deviation above (+1 SD) and below (-1 SD) their respective means (all personality trait variables were mean-centered for this analysis).

For Hypothesis 1 (H1), we tested whether individual characteristics moderate the effect of *preProj* on self-allocation (i.e., leadership generosity). Similarly, for Hypothesis 2 (H2), we examined whether these characteristics moderate the effect of *negOut* on self-allocation (i.e., leadership responsibility).

5.3.1 Moderation Effects of Personality Traits on Leadership Generosity (H1)

For the all-sample analysis, our model included the experimental condition (*preProj*), personality traits, their interaction terms, and control variables for age and gender. Gender-specific analyses were conducted separately for male and female subsamples, omitting the gender control variable but retaining age as a control.

The full results, including all-sample and gender-specific regressions, are presented in Tables A7 and A8 in Appendix A, with Figure A3 providing a visual summary of the interaction effects.

Among the personality traits examined, altruism was a particularly significant moderator of leadership commitment. For the overall sample, we found a significant negative interaction between *preProj* and altruism ($b = -5.45, p < .01$), indicating that more altruistic leaders were more likely to demonstrate generosity.

To clarify this interaction, we analyzed simple slopes at one standard deviation above (+1 SD) and below (-1 SD) the mean of altruism. At low altruism (-1 SD), *preProj* was significantly positively associated with *selfAllocation* ($b = 7.34, p < .05$), indicating that less altruistic leaders allocated more to themselves in the pre-project condition. In contrast, at high altruism (+1 SD), the relationship was significantly negative ($b = -7.53, p < .01$), suggesting that more altruistic leaders allocated less to themselves, demonstrating stronger generosity.

Figure 4 illustrates this interaction effect. Notably, this pattern differed by gender. For male leaders, the interaction effect was marginally significant ($b = -4.72, p < .10$), with a significant positive simple slope at low altruism ($b = 9.76, p < .05$) but no significant effect at high altruism. For female leaders, the interaction effect was strongly significant ($b = -5.99, p < .01$), with a significant negative simple slope at high altruism ($b = -11.87, p < .01$) but no significant effect at low altruism.

These findings suggest that altruism plays a crucial role in moderating the effect of leadership generosity. Less altruistic leaders tend to choose more generous reward allocations after the project, whereas more altruistic leaders are more likely to commit to generous allocations before the project begins.

These experimental findings align remarkably well with our theoretical predictions illustrated in Figure ?? . According to our model, when reputation costs are lower for pre-project decisions compared to post-project

¹⁷Recall that self-allocation was measured as the percentage of total rewards, from 0 to 100, that leaders would take for themselves.

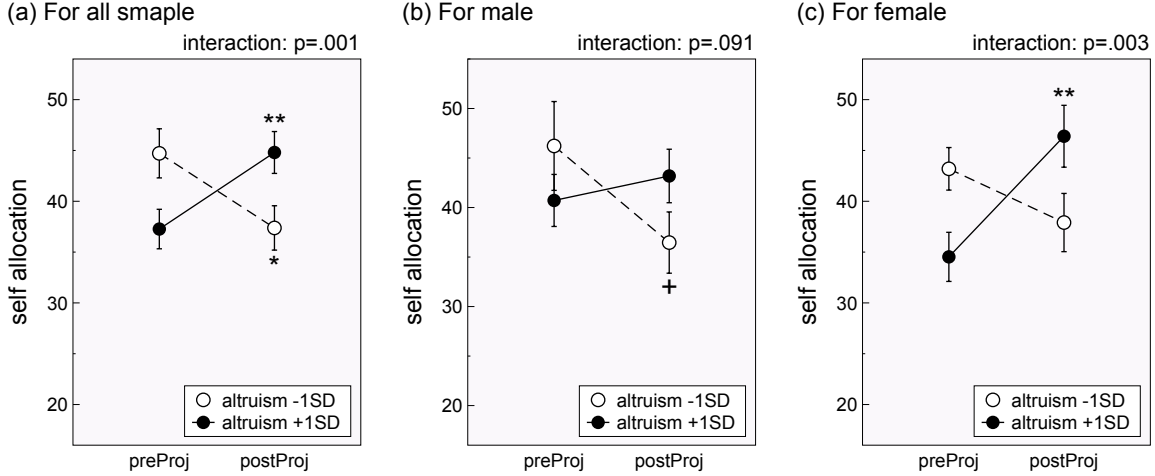


Figure 4: Interaction Effect of Altruism on Leadership Generosity

Note: This figure illustrates the interaction effect of altruism on leadership commitment. Low and high altruism are defined as -1 SD and +1 SD from the mean, respectively. Panel (a) shows results for the full sample, panel (b) for male leaders, and panel (c) for female leaders. Interaction p-values are provided for each panel. Error bars represent standard errors. ** $p < .01$, * $p < .05$, + $p < .10$.

decisions, low-altruism leaders are predicted to allocate more to themselves in pre-project decisions than in post-project decisions ($x^{pre} > x^{post}$), while high-altruism leaders are expected to show the opposite pattern ($x^{pre} < x^{post}$).

Our experimental results confirm these predictions: low-altruism leaders (-1 SD) exhibit $x^{pre} > x^{post}$, whereas high-altruism leaders (+1 SD) demonstrate $x^{pre} < x^{post}$. This alignment suggests that our model, despite its simplifying assumptions about reputation costs, successfully captures how altruism influences leadership styles related to generosity.

While altruism showed the most prominent moderation effect, other personality traits also demonstrated significant and marginally significant interaction effects, particularly among female leaders. Both job satisfaction (*jobSat*) and optimism (*optimism*) exhibited significant negative interaction effects, indicating that female leaders with higher levels of these traits were more likely to allocate rewards generously in the pre-project condition. Competitive orientation (*compet*) also showed a marginally significant negative interaction effect, suggesting that highly competitive female leaders tended to make more generous pre-project allocations.

Overall, these patterns reveal that the strongest pre-project generosity was observed among female leaders who were highly altruistic, satisfied with their current job, optimistic, and competitively oriented. This suggests that pre-commitment generosity may serve as a strategic tool for female leaders who feel secure in their position and confident in their professional environment.

5.3.2 Moderation Effects of Personality Traits on Leadership Responsibility (H2)

To examine the potential moderating effects of personality traits on leadership responsibility (H2), we conducted a series of regression analyses, following the same approach as in the previous section. The results are presented in Appendix Table A8.

We observed that altruism significantly moderates the relationship between outcome condition and self-allocation. For the overall sample, leaders with low altruism (-1 SD) showed a stronger tendency to take responsibility by reducing their self-allocation in negative outcome scenarios compared to leaders with high altruism (+1 SD), who exhibited little change. This pattern was consistent across both male and female leaders, suggesting that less altruistic leaders are more inclined to demonstrate responsibility regardless of gender.

These findings align well with our theoretical framework. As shown in (7) in Section 3.3, the model predicts that higher altruism (α) weakens the difference between self-allocations in positive and negative outcome conditions. This pattern is clearly observed in our data: leaders with lower altruism show a stronger tendency to

Table 2: Moderating Effects of Occupation on Self-Allocation

Variable	H1: Generosity		H2: Responsibility	
	Coefficient	SE	Coefficient	SE
<i>preProj / negOut</i>	-2.57	3.18	0.00	4.31
<i>regularStaff</i>	-0.07	2.68	3.01	3.49
<i>managerialStaff</i>	-7.74*	3.86	8.45	6.33
<i>publicServant</i>	-5.71	4.24	4.49	5.77
<i>otherOccupations</i>	-4.73	3.46	-2.23	4.15
<i>preProj/negOut</i> × <i>regularStaff</i>	-0.36	3.79	-9.79 ⁺	5.22
<i>preProj/negOut</i> × <i>managerialStaff</i>	12.79*	5.58	-20.58*	9.45
<i>preProj/negOut</i> × <i>publicServant</i>	5.17	5.96	-10.87	7.69
<i>preProj/negOut</i> × <i>otherOccupations</i>	4.79	4.72	-3.25	5.80
<i>age</i>	0.06	0.07	-0.03	0.09
<i>female</i>	1.53	1.48	4.33*	2.02
Prob > <i>F</i>	0.403		0.002	
N	260		260	

Note: This table presents results from robust regression estimating the moderating effects of occupation on self-allocation. *partTime* is the reference category for occupation variables. Robust standard errors are reported. ** $p < .01$, * $p < .05$, + $p < .10$.

reduce their self-allocation following negative outcomes, consistent with the model’s predictions.

In addition to altruism, several other personality traits also moderated the responsibility effect. Leaders with lower risk-taking propensity, lower trust in others, lower job satisfaction, and lower career ambition all showed a stronger tendency to take responsibility in response to negative outcomes. Similarly, leaders with high in modesty and greed avoidance exhibited a more pronounced sense of responsibility. These patterns were particularly evident among male leaders, suggesting that personality traits strongly influence how leaders respond to negative outcomes.

Synthesizing these moderation effects reveals a counterintuitive pattern that challenges conventional views on leadership. Leaders who exhibit the strongest responsibility behaviors tend to possess traits traditionally associated with “weak” leadership: they are less risk-taking, less competitive, less trusting, and less ambitious, yet more modest and risk-averse. This profile contrasts with the stereotypical image of a “strong” leader—one who is risk-taking, competitive, and ambitious (Judge et al., 2002; Zaccaro et al., 2018).¹⁸

More importantly, our theoretical model suggests that the responsibility effect ($x^{pos} - x^{neg}$) becomes more pronounced when leaders perceive reputation costs to be higher for negative outcomes compared to positive outcomes. This aligns well with our empirical findings: leaders who are more risk-averse, less trusting, less ambitious, and less competitive—traits often associated with “weak” leadership—may be more inclined to perceive negative outcomes as carrying greater reputational risks. This heightened sensitivity likely drives them to take stronger responsibility by reducing self-allocation following negative outcomes.

5.3.3 Moderating Effects of Occupations

To investigate how occupational characteristics influence the expression of generosity and responsibility in leadership decisions, we conducted additional moderated regression analyses.¹⁹ Table 2 presents these results, revealing distinct patterns across different occupational categories.

¹⁸Comprehensive reviews of leadership research consistently identify traits such as risk-taking, competitiveness, and career ambition as key characteristics of effective leaders (Judge et al., 2002), and these traits continue to dominate our understanding of successful leadership (Zaccaro et al., 2018).

¹⁹In Appendix, we also examined generational effects, including age and the experience of Japan’s Employment Ice Age (1970-1983 birth cohort). The Employment Ice Age refers to a period (approximately 1993-2005) when Japanese new graduates faced exceptionally difficult employment conditions. We coded respondents born between 1970-1983, who entered the job market during this period, as the Ice Age generation (*iceAge* = 1). As shown in Appendix Tables A9 and A10, we found no significant moderating effects of either age or the Ice Age experience on leadership generosity (H1) or responsibility (H2) across all samples.

As shown in Table 2, differences in leadership style were observed across occupational categories, with *partTime* workers serving as the reference group. For leadership generosity (H1), managerial staff exhibited a significant positive interaction with the *preProj* dummy ($b = 12.79$, $p < .05$), indicating that the difference between pre-project and post-project allocations is 12.79 points more positive for managers than for part-time respondents. This suggests that managers may leverage their pre-project allocation authority to secure larger shares, allocating more to themselves in the pre-project condition compared to the post-project condition, to a greater extent than part-time respondents.

Leadership responsibility (H2) showed more pronounced occupational differences. Regular staff displayed a marginally significant negative interaction with *negOut* ($b = -9.79$, $p < .10$), while managerial staff exhibited an even stronger negative effect ($b = -20.58$, $p < .05$). This indicates that both regular and managerial employees tend to exhibit stronger responsibility in response to negative outcomes, with managers demonstrating particularly pronounced responsibility.

Notably, despite representing only 7% of our sample, managerial staff exhibited significant interaction effects in both H1 and H2, suggesting that leadership experience may intensify both generosity and responsibility tendencies. The robustness of these effects, despite the relatively small sample size, highlights how managerial experience enhances distinct leadership styles in reward allocation.

5.4 Mediating Roles of Decision Motivators

Here, we examine the psychological mechanisms through which leaders make their reward allocation choices, focusing on how various decision motivators mediate these leadership behaviors.

5.4.1 Mediating Role of Self-Allocation Motivations

After making their allocation decisions, participants rated the importance of various reasons for their choices. In the pre-project condition, they evaluated four potential motivations, including a unique motivation to encourage team members' effort (*motivateMember*) due to its relevance to pre-project timing. In all other conditions, participants assessed three common motivations: concern for social image (*socialImage*), securing personal benefits (*selfBenefit*), and benefiting team members (*memberBenefit*). Our preliminary analysis (Appendix Table A11) revealed that *motivateMember* played a relatively minor role in the pre-project condition.

We conducted parallel mediation analyses to examine how these self-reported motivations—measured across all four conditions (*socialImage*, *selfBenefit*, and *memberBenefit*)—mediate the effects of both generosity (H1) and responsibility (H2) on allocation decisions. This approach allows us to identify which of these three common motivations play a key role in driving generous commitment (H1) and responsible accountability (H2) in leaders' reward allocation decisions. Table 3 presents the results.

For H1, we conducted a parallel mediation analysis with *preProj* as the independent variable, *selfAllocation* as the dependent variable, and *socialImage*, *selfBenefit*, and *memberBenefit* as parallel mediators. The analysis revealed notable gender differences in the mediating mechanisms: female leaders demonstrated a significant negative indirect effect through *memberBenefit* ($b = -1.06$, $p < .05$, 95% BCa CI [-3.45, -0.14])²⁰, suggesting that the pre-project context may heighten their motivation to prioritize team member benefits, which in turn drives them toward more generous commitment. In contrast, male leaders showed no such mediation effect through *memberBenefit* ($b = 0.18$, n.s.), and if anything, the direction of the effect was opposite.

For H2, we used a similar parallel mediation model, with *negOut* as the independent variable. For H2, we used a similar parallel mediation model, with *negOut* as the independent variable. For the full sample, we observed a significant negative indirect effect through *selfBenefit* ($b = -1.71$, 95% BCa CI [-3.96, -0.26]).

Notably, this mediation pattern differed by gender. For male leaders, the indirect effect through *selfBenefit* was particularly strong, remaining significant even at the 99% confidence level ($b = -3.20$, 99% BCa CI [-7.89, -0.66]). In contrast, none of the mediators showed significant effects for female leaders. This suggests that while both genders exhibit responsibility, male leaders are primarily driven by decreased self-benefit motivations, whereas female leaders may rely on other psychological mechanisms.

²⁰BCa refers to 95% bias-corrected and accelerated confidence intervals.

Table 3: Mediating Role of Self-Allocation Motivations

Sample	Mediator	H1: Generosity			H2: Responsibility		
		Indirect Effect	SE	95% BCa CI	Indirect Effect	SE	95% BCa CI
All	<i>socialImage</i>	0.11	0.25	[-0.14, 1.02]	0.04	0.19	[-1.76, 0.71]
	<i>selfBenefit</i>	-0.77	0.68	[-2.35, 0.40]	-1.71*	0.93	[-3.96, -0.26]
	<i>memberBenefit</i>	-0.44 ⁺	0.37	[-1.50, 0.05]	-0.50	0.61	[-2.00, 0.47]
Male	<i>socialImage</i>	-0.44	0.69	[-2.45, 0.50]	0.02	0.35	[-0.39, 1.01]
	<i>selfBenefit</i>	0.15	1.16	[-2.28, 2.36]	-3.20**	1.54	[-7.37, -0.92]
	<i>memberBenefit</i>	0.18	0.43	[-0.27, 1.87]	-2.90 ⁺	1.78	[-7.10, 0.07]
Female	<i>socialImage</i>	0.14	0.40	[-0.43, 1.35]	-0.08	0.37	[-1.36, 0.34]
	<i>selfBenefit</i>	-1.28 ⁺	0.84	[-3.34, 0.03]	-0.43	0.86	[-2.71, -0.77]
	<i>memberBenefit</i>	-1.06*	0.73	[-3.45, -0.14]	-0.19	0.51	[-1.96, 0.38]

Note: This table presents the results of structural equation modeling (SEM) analyses examining the effects of leadership generosity (H1) and responsibility (H2) on self-allocation decisions, mediated through *socialImage*, *selfBenefit*, and *memberBenefit*. The analysis was conducted for the full sample, as well as separately for male and female participants. *selfAllocation* is the dependent variable, with intervention conditions (*preProj* for H1, *negOut* for H2) as independent variables, controlling for *age* and gender (*female*). Indirect effects and their 95% bias-corrected and accelerated (BCa) confidence intervals were estimated using bootstrap resampling (5000 iterations). Notably, for H2, in the male subsample, the indirect effect through *selfBenefit* remained significant at the 99% BCa CI [-7.89, -0.66]. ⁺ $p < .10$, * $p < .05$, ** $p < .01$.

Table 4: Mediating Roles of Leader Effort Importance

Sample	H1: Generosity			H2: Responsibility		
	Indirect Effect	SE	95% BCa CI	Indirect Effect	SE	95% BCa CI
All	-0.04	0.19	[-0.58, 0.23]	-1.77*	1.02	[-4.18, -0.10]
Male	0.10	0.34	[-0.33, 1.28]	-5.02**	2.12	[-10.32, -1.62]
Female	-0.05	0.40	[-0.93, 0.81]	0.06	0.68	[-1.11, 1.51]

Note: This table presents the results of a mediation analysis examining the effects of leadership generosity (H1) and responsibility (H2) on self-allocation decisions, with the perceived importance of the leader’s effort for project success (*leadImp*) as the mediator. The analysis was conducted for the full sample, as well as separately for male and female participants. *selfAllocation* is the dependent variable, with intervention conditions (*preProj* for H1, *negOut* for H2) as independent variables, controlling for *age* and gender (*female*). Indirect effects and their 95% bias-corrected and accelerated (BCa) confidence intervals were estimated using bootstrap resampling (5000 iterations). Notably, in the male subsample, the coefficient remained significant at the 99% BCa CI [-12,39, -0.72]. ⁺ $p < .10$, * $p < .05$, ** $p < .01$.

5.4.2 Mediating Roles of Leader Effort Importance

Next, we examined whether leaders’ perceptions of their own effort importance, which may vary depending on the situation, act as a key factor driving generous commitment (H1) and responsible accountability (H2). To test this, we conducted mediation analyses using perceived leader effort importance (*leadImp*) as the mediator. This measure captures leaders’ assessments of the relative importance of their leadership compared to team members’ contributions in determining project success or failure. The results, presented in Table 4, reveal how changes in leaders’ self-perceptions about their leadership role shape their reward allocation choices.

For H1, we found no significant indirect effects through *leadImp* across all samples, suggesting that the timing of the decision (pre- vs. post-project) does not significantly influence self-allocation through changes in leaders’ perceptions of their effort’s importance. However, for H2, we observed significant indirect effects, particularly in the male sample. The negative indirect effect ($b = -5.02$, 99% BCa CI [-12,39, -0.72]) suggests that when faced with negative outcomes (vs. positive outcomes), male leaders tend to attribute greater importance to their own

lack of effort, leading to lower self-allocation.

In summary, these mediation analyses highlight two key psychological mechanisms underlying leaders' allocation decisions. For generous commitment (H1), the parallel mediation analysis on self-allocation motivations revealed notable gender differences: female leaders were primarily driven by the motivation to benefit team members (*memberBenefit*), whereas male leaders showed no significant mediation effects.

In contrast, for responsible accountability (H2), both mediation analyses—on self-allocation motivations and perceived leader effort importance—revealed a consistent pattern, particularly among male leaders. Male leaders exhibited a significant negative indirect effect through *selfBenefit*, suggesting they were driven by the belief that they should sacrifice personal gains after negative outcomes. Additionally, the *leadImp* analysis showed that male leaders were more likely to attribute failure to their own lack of effort, which further reduced their self-allocation.

This consistent pattern indicates a notable gender difference in how responsibility manifests in leadership behaviors. Male leaders appear to internalize responsibility by attributing poor outcomes to their own leadership inadequacy, leading to stronger self-blame and a heightened sense of personal accountability. In contrast, the factors influencing female leaders' responsibility remain less clear. Their decisions may instead be shaped by external pressures, such as anticipating greater backlash from both society and the market or adhering to organizational norms that impose stricter accountability expectations on women in leadership roles.

5.5 Summary of Key Findings

Our analyses reveal how leaders make reward allocation decisions in team contexts, focusing on leadership generosity and leadership responsibility. Generosity refers to leaders pre-committing to a smaller share for themselves compared to decisions made after the project ends. Responsibility refers to leaders reducing their own share of rewards after negative outcomes to signal accountability for poor performance.

For leadership generosity (H1), we found partial support for our hypothesis, with notable gender differences. Female leaders were more generous in pre-project decisions, especially those with higher levels of altruism, job satisfaction, optimism, and competitive orientation. Mediation analyses revealed that this generous commitment was primarily driven by female leaders' motivation to benefit team members (*memberBenefit*).

For leadership responsibility (H2), we found robust support for our hypothesis. Male leaders' responsibility was strongly influenced by internalized self-blame and a heightened sense of personal accountability for negative outcomes. These psychological mechanisms were reflected in two key mediators: reduced concern for self-benefit (*selfBenefit*) and an increased tendency to attribute failure to their own lack of effort (*leadImp*). In contrast, female leaders demonstrated responsibility through other psychological factors not directly captured by these mediators.

Our analysis of personality traits revealed intriguing patterns that challenge conventional wisdom about effective leadership. Leaders who demonstrated the strongest responsibility often possessed traits traditionally considered signs of “weaker” leadership—such as being less altruistic, more risk-averse, and exhibiting lower levels of trust, career ambition, and job satisfaction. This finding suggests that the psychological dispositions driving responsibility-taking are fundamentally different from those typically associated with successful leadership.

Our experimental findings align well with the predictions derived from our theoretical model. The data offered partial support for the generosity hypothesis (H1) and strong support for the responsibility hypothesis (H2). Specifically, the experimental results confirmed the model's prediction that more altruistic leaders are likely to engage in generous commitment, while less altruistic leaders are more prone to demonstrate responsible accountability.

Furthermore, the consistency between our theoretical predictions and empirical results becomes even clearer when we consider how various personality traits may shape leaders' perception of situation-dependent reputation costs. For instance, leaders with traits such as risk aversion, lower trust, and lower career ambition—often associated with “weaker” leadership—demonstrated stronger responsibility behaviors. This pattern suggests that these leaders may be more sensitive to reputational risks in negative-outcome situations, which drives them to take greater responsibility.

6 Concluding Remarks

This study examined how leaders make reward allocation decisions in team settings, focusing on two key aspects of leadership behavior: generous commitment and responsible accountability. Our theoretical framework provides clear predictions about how leaders' reward allocation decisions are influenced by timing and outcome information. Through a randomized controlled experiment with 520 Japanese participants, we test these theoretical predictions, and our experimental results largely support them.

Our experimental findings reveal intriguing results on leadership generosity and responsibility. Generosity, meaning leaders' commitment to more generous reward allocation rules in the pre-project phase compared to the post-project phase, received partial support. Female leaders demonstrated greater generosity, particularly those with higher levels of altruism, while male leaders showed no consistent pattern. Responsibility, meaning leaders' reduction of their share of rewards when facing negative outcomes compared to positive ones, received robust support. Male leaders showed stronger responsibility through psychological mechanisms related to internalized self-blame and heightened personal accountability for negative outcomes. Notably, leaders demonstrating the strongest responsibility often possessed traits traditionally associated with "weaker" leadership. These experimental results align well with our theoretical analysis, confirming that generosity is more likely among highly altruistic leaders, while less altruistic leaders tend to show stronger responsibility.

Our study contributes to the literature on leadership by integrating theoretical predictions with empirical validation through a pre-registered experiment, offering new insights into how gender and personality shape leadership styles in reward allocation decisions in teams.

Our study offers several practical and managerial implications for leadership selection, development, and decision-making. First, our findings highlight the role of pre-commitment in leadership decision-making. Both our theoretical model and experimental evidence suggest that leaders who commit to a reward allocation before the project starts tend to make more generous decisions. We also identify key leader characteristics that influence this tendency.

Second, our findings suggest that individual differences play an important role in leadership behavior, which has implications for both leader selection and development. Gender and personality traits influence how leaders allocate rewards and how they respond to performance outcomes. Understanding these factors can help organizations align leadership styles with team needs when selecting leaders. Additionally, leadership development programs may benefit from training leaders to recognize the strategic value of pre-commitment and use reward allocation effectively. Developing self-awareness and emotional intelligence can also help leaders better understand how their personal characteristics shape their decision-making tendencies.

However, several limitations of our study should be noted. First, while our experiment provides valuable insights into leadership decision-making, it was scenario-based, meaning that participants' choices may not fully capture their behavior in real organizational settings where actual rewards are at stake. Future research using field experiments or observational data would help validate and extend our findings.

Second, our study focused solely on leaders' reward allocation decisions, without examining how team members respond to these choices. In real organizations, employees' reactions to leaders' generous commitment and responsible accountability measures play a crucial role in shaping overall team dynamics. Understanding these responses through complementary experiments would provide a more comprehensive picture of leadership effectiveness.

Third, our sample consisted entirely of Japanese participants, and cultural factors may influence both leadership behaviors and their interpretation. For instance, prior research has shown that Japanese children are more prone to experiencing shame, which leads them to prioritize others' evaluations and social harmony, and when their shame is particularly strong, they may exhibit excessive self-criticism or blame others compared to American children (Furukawa et al., 2012). Such cultural differences in shame sensitivity and social evaluation concerns might affect how leaders perceive and respond to reputation costs, particularly in negative outcome scenarios. Cross-cultural studies would be necessary to assess the generalizability of our findings and to explore whether similar incentive structures drive leadership decisions in different cultural contexts.

Finally, we focused on monetary reward allocation as a mechanism for demonstrating generosity and responsibility. However, in real organizations, leaders utilize various other tools, such as resource allocation, task delegation, and public acknowledgment of responsibility. Investigating how these alternative mechanisms interact with reward allocation would offer deeper insights into leadership strategies. These areas remain open for future research.

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Appendix

A Table and Figures

Table A1: Description of Variables and Survey Questions

Variable	Survey Question	Response
(i) Demographic Variables		
<i>female</i>	Please indicate your gender.	(1) Male; (2) Female
<i>age</i>	Please indicate your age.	Numerical values
Occupation dummy	Please indicate your occupation.	14 options
<i>regularStaff</i>		Regular employee (non-managerial)
<i>managerialStaff</i>		Regular employee (managerial)
<i>executive</i>		Company executive (president/officer)
<i>publicServant</i>		Public servant/teacher/non-profit organization employee
<i>tempContract</i>		Temporary/contract worker
<i>selfEmployed</i>		Self-employed (freelancer/service provider)
<i>soho</i>		SOHO
<i>agriFishery</i>		Agriculture/fishery
<i>professional</i>		Professional (lawyer/accountant/medical)
<i>partTime</i>		Part-time/casual worker
[Screened out]		Housewife/househusband
[Screened out]		Student
[Screened out]		Unemployed
<i>OtherOccupation</i>		Other occupation
(ii) Personality Traits		
Personality measures	Please indicate how well each of the following statements describes you.	
<i>altruism</i>	I do good deeds without expecting anything in return.	1 (Strongly disagree) - 7 (Strongly agree)
<i>optimism</i>	I am optimistic about the future.	1 (Strongly disagree) - 7 (Strongly agree)
<i>riskTaking</i>	I am not afraid to take risks.	1 (Strongly disagree) - 7 (Strongly agree)
<i>trust</i>	I generally assume that people have good intentions.	1 (Strongly disagree) - 7 (Strongly agree)
<i>jobSat</i>	I feel a high level of satisfaction with my current job.	1 (Strongly disagree) - 7 (Strongly agree)
<i>careerAmb</i>	I value promotion and success in my work.	1 (Strongly disagree) - 7 (Strongly agree)
<i>big5Consc1</i> †	I tend to be disorganized and careless.	1 (Strongly disagree) - 7 (Strongly agree)
<i>compet</i>	Competition brings the best out of me.	1 (Strongly disagree) - 7 (Strongly agree)
<i>sincerity</i>	I would not try to gain promotions through flattery, even if it might be effective.	1 (Strongly disagree) - 7 (Strongly agree)
<i>fairness</i> †	If I know I'll never get caught, I'd steal 100 million yen.	1 (Strongly disagree) - 7 (Strongly agree)
<i>modesty</i> †	I have a right to be respected more than the average person.	1 (Strongly disagree) - 7 (Strongly agree)
<i>greedAvoid</i> †	I get a lot of enjoyment from owning expensive, luxurious things.	1 (Strongly disagree) - 7 (Strongly agree)
<i>big5Consc2</i>	I am thorough and strict with myself.	1 (Strongly disagree) - 7 (Strongly agree)
Behavioral measures		
<i>WTB</i>	Suppose there is a "Speed Lottery" that has a 50% chance of winning 10,000 yen and a 50% chance of winning nothing. How much would you be willing to pay to purchase this lottery ticket? Please indicate the maximum price you would consider paying.	Numerical values (yen)

Continued on next page

Table A1 – continued from previous page

Variable	Survey Question	Response
<i>WTD</i>	Suppose a major earthquake has occurred in Japan. While your area suffered no damage, there are other regions that experienced severe damage. If you had 100,000 yen in unexpected money at this time, how much would you be willing to donate for disaster recovery?	Numerical values (yen) from 0 to 100,000
(iii) Outcome Variable		
<i>selfAllocation</i>	As the leader of this team, what do you think you would decide for your own reward, as well as the rewards for the members, and how would you announce this in front of the members at this meeting? Please specify the percentage of the total rewards that you would take for yourself, between 0 to 100.	You will receive ()% of the total rewards
(iv) Attention and Manipulation Checks		
[Screening question]‡	In the scenario you just read, at what timing did you as a leader decide and announce the reward allocation to members?	(1) Before the project started, (2) After the project ended but before knowing the results, (3) After the project ended and results were known, (4) Don't remember
(v) Decision Motivators		
Allocation motivations	Please indicate your reasons for choosing that reward allocation.	
<i>socialImage</i>	Because I want team members to view me favorably.	1 (Strongly disagree) - 7 (Strongly agree)
<i>motivateMember</i> §	Because I want to motivate team members to put in greater effort.	1 (Strongly disagree) - 7 (Strongly agree)
<i>selfBenefit</i>	Because I wanted to secure a larger share for myself.	1 (Strongly disagree) - 7 (Strongly agree)
<i>memberBenefit</i>	Because I wanted to give more to the members.	1 (Strongly disagree) - 7 (Strongly agree)
Leader effort importance	Please share your thoughts about this project's outcome.	
<i>leadImp</i>	For <i>preProj</i> & <i>postProj</i> cond.: For this project to succeed, which do you think is more important—your efforts as a leader or the members' efforts?	1 (Leader's efforts important) - 5 (Members' effort important)
<i>leadImp</i>	For <i>posOut</i> cond.: As factors in the project's success, which was more important—your efforts as a leader or the members' efforts?	1 (Leader's efforts important) - 5 (Members' effort important)
<i>leadImp</i>	For <i>negOut</i> cond.: As factors in the project's failure, which was more important—your lack of effort as a leader or the members' lack of efforts?	1 (Leader's lack of effort important) - 5 (Members' lack of effort important)

Note: †Reverse-coded items. ‡The order of response options (1)-(3) was randomized across participants. §Item included only in the preProj condition.

Table A2: Summary Statistics

Variable	N	Mean	SD	Min	Max
A. Demographic Variables					
<i>female</i>	520	0.50	0.50	0.00	1.00
<i>age</i>	520	39.36	10.82	20.00	59.00
<i>regularStaff</i>	520	0.44	0.50	0.00	1.00
<i>managerialStaff</i>	520	0.07	0.26	0.00	1.00
<i>publicServant</i>	520	0.09	0.28	0.00	1.00
<i>professional</i>	520	0.06	0.23	0.00	1.00
<i>partTime</i>	520	0.19	0.40	0.00	1.00
<i>tempContract</i>	520	0.04	0.20	0.00	1.00
<i>selfEmployed</i>	520	0.05	0.21	0.00	1.00
<i>soho</i>	520	0.01	0.11	0.00	1.00
<i>agriFishery</i>	520	0.01	0.08	0.00	1.00
<i>otherOccupations</i>	520	0.03	0.16	0.00	1.00
B. Personality Traits					
<i>altruism</i>	520	3.82	1.36	1.00	7.00
<i>optimism</i>	520	3.50	1.43	1.00	7.00
<i>riskTaking</i>	520	3.15	1.35	1.00	7.00
<i>trust</i>	520	3.63	1.30	1.00	7.00
<i>jobSat</i>	520	3.58	1.40	1.00	7.00
<i>careerAmb</i>	520	3.28	1.45	1.00	7.00
<i>big5Consc</i>	520	3.80	1.14	1.00	7.00
<i>compet</i>	520	3.20	1.34	1.00	7.00
<i>sincerity</i>	520	3.99	1.42	1.00	7.00
<i>fairness</i>	520	4.90	1.70	1.00	7.00
<i>modesty</i>	520	4.76	1.36	1.00	7.00
<i>greedAvoid</i>	520	4.87	1.43	1.00	7.00
C. Treatment Dummies					
<i>preProj</i>	260	0.50	0.50	0.00	1.00
<i>negOut</i>	260	0.50	0.50	0.00	1.00
D. Outcome Variable					
<i>selfAllocation</i>	520	40.34	18.85	0.00	100.00
E. Decision Motivators					
<i>motivateMember</i>	130	4.36	1.45	1.00	7.00
<i>socialImage</i>	520	3.29	1.36	1.00	7.00
<i>selfBenefit</i>	520	3.56	1.46	1.00	7.00
<i>memberBenefit</i>	520	3.64	1.34	1.00	7.00
<i>leadImp</i>	520	3.03	0.79	1.00	5.00

Note: (i) Categories A and B represent measures that were common to all participants and were assessed prior to the intervention. (ii) Personality traits are measured on a 7-point Likert scale. (iii) Treatment dummies: *preProj* represents the pre-project (vs. post-project) decision condition, and *negOut* represents the negative (vs. positive) outcome condition.

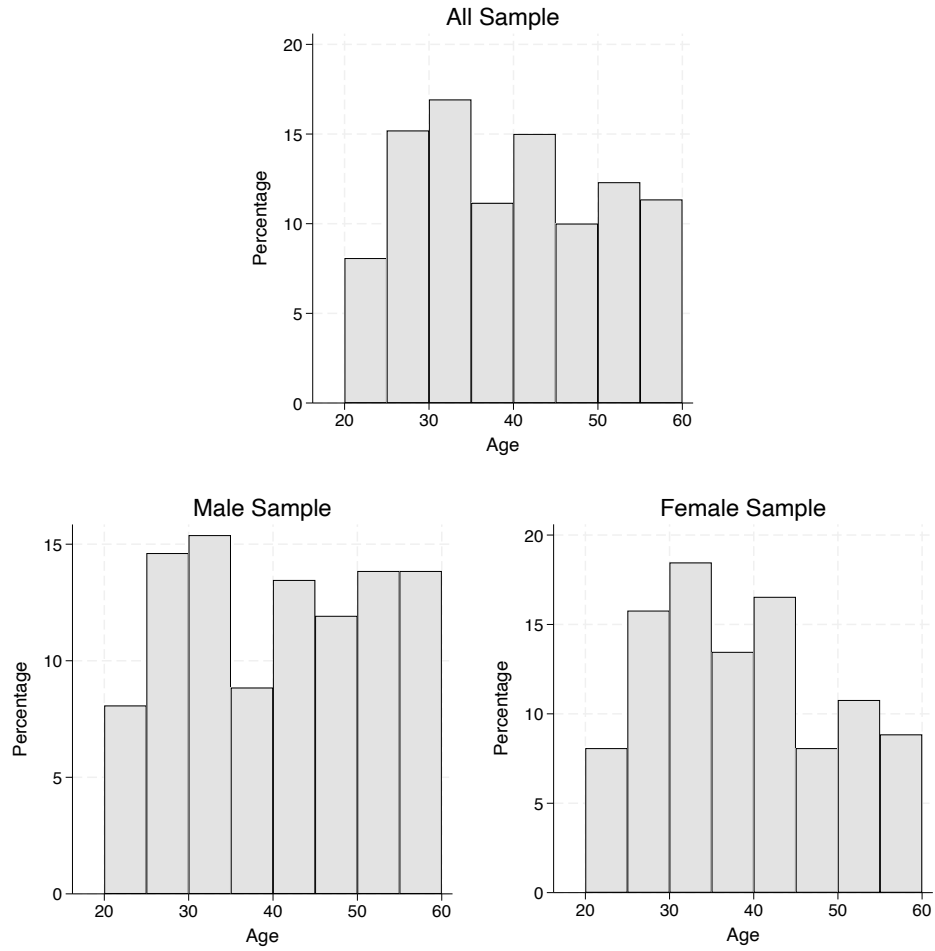


Figure A1: Age Distribution of Survey Respondents: Full Sample and Gender Subsamples

Note: This figure shows the age distribution of survey respondents for the full sample and by gender. The width of each bar represents a 5-year interval. The sample includes 520 respondents (260 males and 260 females) aged 20-60, with a mean age of 39.36 years (SD = 10.82). The distribution differs between male and female subsamples: while male respondents are relatively evenly distributed across ages, female respondents are underrepresented in older age groups, likely due to lower workforce participation among women in those generations.

Table A3: Balance Check

	(1) preProj		(2) postProj		(3) negOut		(4) posOut		p-value	
	Mean	SE	Mean	SE	Mean	SE	Mean	SE	(1) vs (2)	(3) vs (4)
A. Demographic variables										
<i>female</i>	0.50	0.04	0.50	0.04	0.50	0.04	0.50	0.04	1.00	1.00
<i>age</i>	40.06	0.93	39.09	0.98	38.99	0.95	39.29	0.95	.47	.82
<i>regularStaff</i>	0.45	0.04	0.47	0.04	0.36	0.04	0.47	0.04	.80	.08
<i>managerialStaff</i>	0.09	0.03	0.11	0.03	0.05	0.02	0.05	0.02	.53	.77
<i>executive</i>	0.03	0.02	0.00	0.00	0.02	0.01	0.02	0.01	.04	.65
<i>publicServant</i>	0.09	0.03	0.08	0.02	0.12	0.03	0.07	0.02	.82	.20
<i>tempContract</i>	0.03	0.02	0.03	0.02	0.08	0.02	0.03	0.02	1.00	.10
<i>selfEmployed</i>	0.06	0.02	0.05	0.02	0.06	0.02	0.02	0.01	.58	.12
<i>soho</i>	0.00	0.00	0.02	0.01	0.02	0.01	0.02	0.01	.16	1.00
<i>agriFishery</i>	0.00	0.00	0.01	0.01	0.00	0.00	0.02	0.01	.32	.16
<i>professional</i>	0.03	0.02	0.02	0.01	0.12	0.03	0.06	0.02	.41	.09
<i>partTime</i>	0.19	0.04	0.20	0.04	0.16	0.03	0.22	0.04	.88	.21
<i>otherOccupations</i>	0.03	0.02	0.03	0.02	0.02	0.01	0.02	0.01	1.00	.65
B. Personality traits										
<i>altruism</i>	3.88	0.10	3.68	0.12	3.92	0.14	3.80	0.12	.32	.46
<i>optimism</i>	3.62	0.12	3.42	0.12	3.48	0.13	3.48	0.13	.23	.87
<i>riskTaking</i>	3.27	0.12	3.12	0.11	3.12	0.13	3.08	0.12	.36	.97
<i>trust</i>	3.62	0.10	3.64	0.11	3.56	0.12	3.69	0.12	.87	.72
<i>jobSat</i>	3.68	0.11	3.42	0.11	3.62	0.15	3.58	0.12	.08	.95
<i>careerAmb</i>	3.42	0.12	3.29	0.12	3.18	0.15	3.25	0.13	.39	.63
<i>big5Consc</i>	3.97	0.09	3.84	0.09	3.73	0.12	3.66	0.10	.44	.38
<i>compet</i>	3.38	0.11	3.09	0.11	3.08	0.13	3.25	0.11	.06	.28
<i>sincerity</i>	4.15	0.12	3.94	0.12	3.93	0.14	3.94	0.12	.20	.97
<i>fairness</i>	4.76	0.16	4.84	0.14	5.14	0.15	4.86	0.15	.79	.23
<i>modesty</i>	4.68	0.12	4.76	0.12	4.87	0.13	4.72	0.12	.60	.34
<i>greedAvoid</i>	4.81	0.12	4.83	0.12	4.89	0.14	4.95	0.13	.70	.81

Note: Reported p-values are uncorrected for multiple comparisons. With Bonferroni correction, no significant differences remain between conditions. The *executive* category, showing a significant difference, is later merged into *otherOccupations* due to small sample size. p-values compare (1) pre-project vs post-project and (2) negative vs positive outcome conditions.

Table A4: Polychoric Correlation Matrix for All Sample

	a	b	c	d	e	f	g	h	i	j	k	l
a. <i>altruism</i>	1.00											
b. <i>optimism</i>	0.35	1.00										
c. <i>riskTaking</i>	0.32	0.54	1.00									
d. <i>trust</i>	0.40	0.56	0.40	1.00								
e. <i>jobSat</i>	0.48	0.53	0.43	0.48	1.00							
f. <i>careerAmb</i>	0.28	0.37	0.46	0.37	0.58	1.00						
g. <i>big5Consc</i>	0.17	0.13	0.15	0.11	0.26	0.21	1.00					
h. <i>compet</i>	0.29	0.32	0.44	0.36	0.45	0.57	0.17	1.00				
i. <i>sincerity</i>	0.33	0.20	0.25	0.30	0.26	0.13	0.03	0.22	1.00			
j. <i>fairness</i>	0.13	-0.17	-0.21	-0.04	0.02	-0.13	0.18	-0.18	-0.03	1.00		
k. <i>modesty</i>	-0.28	-0.35	-0.39	-0.28	-0.38	-0.48	-0.30	-0.51	-0.15	0.30	1.00	
l. <i>greedAvoid</i>	-0.15	-0.33	-0.40	-0.30	-0.23	-0.50	-0.14	-0.44	-0.01	0.31	0.58	1.00

Note: The highest observed correlation is 0.58 between job satisfaction (*jobSat*) and career ambition (*careerAmb*).

Table A5: Polychoric Correlation Matrix for Male Sample

	a	b	c	d	e	f	g	h	i	j	k	l
a. <i>altruism</i>	1.00											
b. <i>optimism</i>	0.25	1.00										
c. <i>riskTaking</i>	0.33	0.49	1.00									
d. <i>trust</i>	0.37	0.56	0.40	1.00								
e. <i>jobSat</i>	0.36	0.48	0.45	0.43	1.00							
f. <i>careerAmb</i>	0.31	0.34	0.50	0.33	0.63	1.00						
g. <i>big5Consc</i>	0.12	0.05	0.22	0.05	0.30	0.26	1.00					
h. <i>compet</i>	0.24	0.35	0.45	0.38	0.48	0.66	0.25	1.00				
i. <i>sincerity</i>	0.36	0.14	0.20	0.29	0.23	0.12	0.01	0.18	1.00			
j. <i>fairness</i>	0.18	-0.24	-0.16	-0.12	-0.00	-0.12	0.20	-0.20	0.09	1.00		
k. <i>modesty</i>	-0.30	-0.35	-0.40	-0.32	-0.36	-0.57	-0.26	-0.53	-0.14	0.26	1.00	
l. <i>greedAvoid</i>	-0.19	-0.34	-0.40	-0.30	-0.31	-0.57	-0.22	-0.62	-0.02	0.31	0.63	1.00

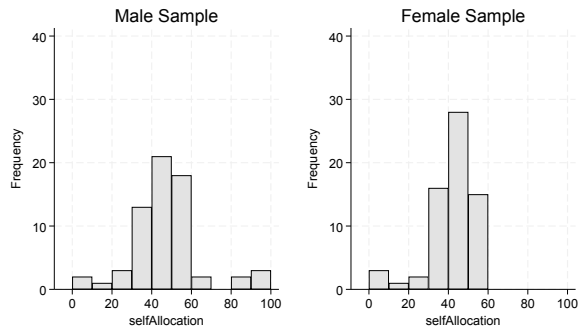
Note: The highest observed correlation is 0.66 between competitiveness (*compet*) and career ambition (*careerAmb*).

Table A6: Polychoric Correlation Matrix for Female Sample

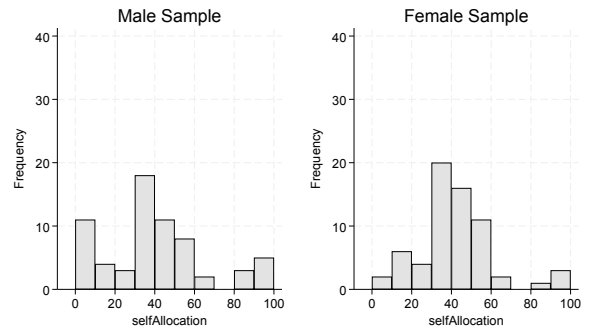
	a	b	c	d	e	f	g	h	i	j	k	l
a. <i>altruism</i>	1.00											
b. <i>optimism</i>	0.42	1.00										
c. <i>riskTaking</i>	0.32	0.58	1.00									
d. <i>trust</i>	0.44	0.57	0.41	1.00								
e. <i>jobSat</i>	0.58	0.59	0.42	0.54	1.00							
f. <i>careerAmb</i>	0.26	0.40	0.43	0.41	0.55	1.00						
g. <i>big5Consc</i>	0.21	0.20	0.11	0.15	0.22	0.18	1.00					
h. <i>compet</i>	0.35	0.30	0.45	0.35	0.42	0.50	0.12	1.00				
i. <i>sincerity</i>	0.30	0.26	0.30	0.32	0.29	0.15	0.05	0.26	1.00			
j. <i>fairness</i>	0.08	-0.10	-0.25	0.03	0.04	-0.12	0.15	-0.15	-0.15	1.00		
k. <i>modesty</i>	-0.28	-0.35	-0.38	-0.25	-0.40	-0.41	-0.34	-0.49	-0.17	0.32	1.00	
l. <i>greedAvoid</i>	-0.12	-0.32	-0.40	-0.29	-0.16	-0.43	-0.08	-0.29	0.00	0.31	0.53	1.00

Note: The highest observed correlation is 0.59 between job satisfaction (*jobSat*) and optimism (*optimism*).

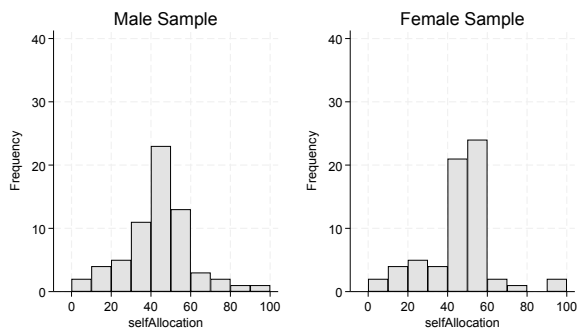
preProj



negOut



postProj



posOut

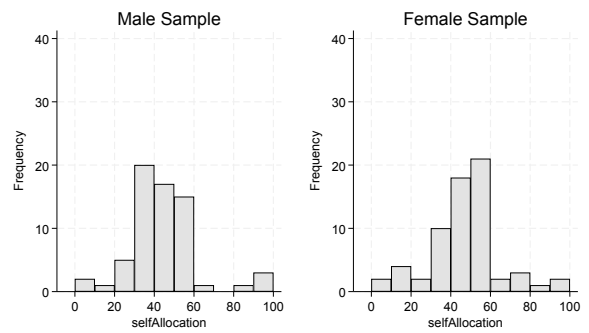


Figure A2: Distribution of Self-Allocation across Experimental Conditions

Note: This figure shows the distribution of *selfAllocation*. The horizontal axis represents the percentage of total rewards allocated to oneself (ranging from 0 to 100), while the vertical axis indicates the frequency of respondents selecting each allocation level. Notably, in the pre-project condition, no female leaders allocated more than 60% of the rewards to themselves. In contrast, in the negative-outcome condition, a substantial number of male leaders opted for extremely low self-allocations, suggesting a stronger response to accountability pressures in this group.

Table A7: Moderation and Simple Slope of Personality Traits on H1 (Generosity)

Trait	Sample	preProj	trait	female	preProj \times trait	trait -1SD	trait +1SD
<i>altruism</i>	All	-0.10 (1.97)	2.72* (1.13)	-1.02 (1.98)	-5.45** (1.68)	7.34* (3.25)	-7.53** (2.78)
	Male	3.64 (2.94)	2.60 (1.62)		-4.72 ⁺ (2.74)	9.76 ⁺ (5.45)	-2.47 (3.57)
	Female	-3.29 (2.45)	2.96* (1.47)		-5.99** (1.94)	5.29 (3.56)	-11.87** (3.84)
<i>optimism</i>	All	0.29 (1.99)	0.50 (0.92)	-1.42 (2.04)	-2.26 ⁺ (1.33)	3.50 (2.79)	-2.92 (2.69)
	Male	4.02 (3.03)	0.22 (1.38)		-0.37 (1.86)	4.53 (4.21)	3.51 (3.75)
	Female	-3.02 (2.50)	0.75 (1.17)		-3.83* (1.67)	2.58 (3.42)	-8.62* (3.57)
<i>riskTaking</i>	All	0.24 (2.00)	-0.02 (1.20)	-1.40 (2.09)	-0.83 (1.64)	1.36 (2.91)	-0.88 (3.06)
	Male	4.09 (3.08)	0.68 (1.56)		-0.11 (2.29)	4.23 (4.55)	3.95 (3.95)
	Female	-2.78 (2.51)	-0.31 (1.79)		-1.56 (2.30)	-0.58 (3.61)	-4.97 (4.52)
<i>trust</i>	All	0.12 (2.01)	0.40 (1.26)	-1.09 (2.03)	-2.30 (1.66)	3.11 (2.97)	-2.86 (2.76)
	Male	3.97 (3.08)	-0.05 (2.01)		-0.42 (2.60)	4.50 (5.03)	3.43 (3.85)
	Female	-3.07 (2.55)	0.65 (1.44)		-3.02 (1.93)	0.98 (3.41)	-7.13 ⁺ (3.82)
<i>jobSat</i>	All	0.16 (2.02)	0.56 (1.13)	-1.53 (2.06)	-1.74 (1.58)	2.59 (2.94)	-2.27 (3.04)
	Male	4.00 (3.09)	-1.02 (1.87)		1.97 (2.57)	1.28 (5.01)	6.72 (4.33)
	Female	-3.58 (2.52)	1.67 (1.29)		-4.65* (1.79)	3.00 (3.11)	-10.16** (4.03)
<i>careerAmb</i>	All	0.24 (2.02)	-0.40 (1.09)	-1.57 (2.04)	-0.32 (1.48)	0.70 (2.98)	-0.23 (2.91)
	Male	3.95 (3.07)	-0.99 (1.61)		1.10 (2.30)	2.35 (4.97)	5.55 (4.10)
	Female	-3.16 (2.56)	0.46 (1.23)		-1.94 (1.77)	-0.35 (3.28)	-5.98 (3.96)
<i>big5Consc</i>	All	0.19 (2.04)	0.43 (1.08)	-1.46 (2.05)	-0.61 (1.50)	0.89 (3.20)	-0.50 (2.74)
	Male	4.26 (3.09)	0.39 (1.43)		-1.76 (2.38)	6.18 ⁺ (3.36)	2.33 (4.47)
	Female	-3.43 (2.60)	-0.10 (1.63)		1.05 (2.05)	-4.66 ⁺ (3.45)	-2.19 (3.57)
<i>compet</i>	All	0.18 (2.03)	0.67 (1.16)	-1.39 (2.03)	-1.29 (1.53)	1.91 (2.95)	-1.55 (2.86)
	Male	3.62 (3.08)	0.24 (1.72)		1.46 (2.48)	1.74 (4.27)	5.51 (4.42)
	Female	-3.27 (2.55)	1.66 (1.59)		-3.82 ⁺ (1.98)	2.03 (3.67)	-8.57* (3.75)
<i>sincerity</i>	All	0.25 (2.02)	1.34 (1.04)	1.83 (2.05)	-2.37 ⁺ (1.39)	3.60 (2.97)	-3.11 (2.87)
	Male	4.44 (3.11)	-0.36 (1.56)		-1.32 (2.11)	6.26 ⁺ (4.81)	2.63 (3.54)
	Female	-2.65 (2.57)	2.17 ⁺ (1.29)		-2.96 (1.74)	1.64 (4.01)	-6.95* (3.24)
<i>fairness</i>	All	0.11 (2.02)	-0.99 (0.75)	-1.02 (2.04)	0.23 (1.03)	-0.28 (2.76)	0.49 (2.94)
	Male	3.46 (3.06)	-0.18 (1.20)		-1.79 (1.46)	6.51 ⁺ (3.89)	0.42 (3.91)
	Female	-3.31 (2.56)	-1.39 ⁺ (0.85)		1.74 (1.41)	-6.27 ⁺ (3.69)	-0.35 (3.62)
<i>modesty</i>	All	0.12 (2.02)	-0.58 (1.17)	-1.29 (2.04)	0.30 (1.61)	-0.30 (2.89)	0.53 (2.97)
	Male	3.84 (3.08)	-0.68 (1.95)		-0.26 (2.38)	4.17 (4.00)	3.51 (4.63)
	Female	-3.27 (2.57)	-0.46 (1.44)		1.03 (2.09)	-4.73 (3.70)	-1.81 (3.75)
<i>greedAvoid</i>	All	0.11 (2.02)	1.11 (0.96)	-1.46 (2.03)	-1.03 (1.35)	1.59 (2.84)	-1.37 (2.96)
	Male	3.77 (3.06)	1.47 (1.55)		-2.83 (2.05)	7.71 ⁺ (4.00)	-0.16 (4.33)
	Female	-3.39 (2.56)	0.61 (1.11)		0.86 (1.74)	-4.64 (3.68)	-2.13 (3.73)

Note: This table presents moderated regression analyses examining how personality traits affect the relationship between *preProj* (vs. *postProj*) and self-allocation behavior. For each personality trait, we report the main effects and interaction with the experimental condition, controlling for age gender. For each trait, “trait -1SD” and “trait +1SD” show simple slope analyses evaluating the effect of experimental condition at one standard deviation below and above the mean of the moderating trait. Robust standard errors in parentheses. The sample consists of 260 participants (130 males and 130 females). ⁺ $p < .10$, * $p < .05$, ** $p < .01$.

Table A8: Moderation and Simple Slope of Personality Traits on H2 (Responsibility)

Trait	Sample	negOut	trait	female	negOut × trait	trait -1SD	trait +1SD
<i>altruism</i>	All	-4.79 ⁺ (2.59)	-1.81 (1.43)	1.50 (2.63)	3.90* (1.97)	-10.11* (4.05)	0.53 (3.38)
	Male	-4.63 (4.01)	-3.07 (2.05)		4.01 (3.18)	-9.83 (6.59)	0.56 (4.74)
	Female	-4.96 (3.35)	-0.97 (1.99)		4.18 ⁺ (2.41)	-10.95* (4.89)	1.02 (4.73)
<i>optimism</i>	All	-4.51 ⁺ (2.57)	-1.62 (1.12)	0.82 (2.64)	4.96** (1.88)	-11.58** (3.64)	2.56 (3.77)
	Male	-4.30 (3.98)	-3.18 ⁺ (1.66)		6.17* (3.09)	-12.89* (5.88)	4.29 (5.82)
	Female	-5.18 (3.34)	-0.18 (1.51)		3.86 ⁺ (2.17)	-10.83* (4.14)	0.45 (5.03)
<i>riskTaking</i>	All	-4.34 ⁺ (2.57)	-2.54* (1.24)	1.38 (2.62)	5.97** (1.93)	-12.42** (3.33)	3.73 (3.97)
	Male	-3.96 (3.90)	-3.73 ⁺ (2.11)		7.76** (3.11)	-13.97** (5.27)	6.04 (5.89)
	Female	-4.67 (3.38)	-1.64 (1.56)		4.68 ⁺ (2.46)	-11.26* (4.10)	1.90 (5.47)
<i>trust</i>	All	-4.49 ⁺ (2.55)	-2.58* (1.22)	1.01 (2.59)	6.74** (1.85)	-13.26** (3.68)	4.27 (3.33)
	Male	-4.38 (3.93)	-3.12* (1.54)		8.22** (2.86)	-14.70** (5.46)	5.94 (5.16)
	Female	-4.60 (3.32)	-2.19 (1.87)		5.76* (2.46)	-12.35** (4.84)	3.15 (4.52)
<i>jobSat</i>	All	-4.83 ⁺ (2.54)	-1.77 (1.19)	1.43 (2.58)	5.88** (1.63)	-13.06** (3.59)	3.39 (3.22)
	Male	-4.17 (3.83)	-3.73* (1.58)		8.01** (2.36)	-15.26** (5.06)	6.92 (5.01)
	Female	-5.23 (3.34)	-0.26 (1.77)		4.43* (2.23)	-11.51* (4.95)	1.04 (4.20)
<i>careerAmb</i>	All	-4.14 ⁺ (2.55)	-1.64 (1.02)	1.76 (2.58)	5.62** (1.53)	-12.31** (3.14)	4.02 (3.61)
	Male	-3.50 (3.86)	-1.81 (1.43)		6.97** (2.28)	-13.62** (4.62)	6.62 (5.50)
	Female	-4.65 (3.37)	-1.35 (1.44)		4.13* (2.05)	-10.65** (4.15)	1.35 (4.82)
<i>big5Consc</i>	All	-4.28 ⁺ (2.57)	0.17 (1.22)	1.21 (2.60)	4.86** (1.75)	-9.83** (2.94)	1.26 (3.54)
	Male	-4.16 (3.80)	-1.59 (2.30)		9.22** (2.95)	-14.24** (4.28)	5.93 (5.60)
	Female	-4.65 (3.40)	1.29 (1.19)		1.01 (1.97)	-5.84 (3.94)	-3.46 (4.30)
<i>compet</i>	All	-4.19 ⁺ (2.50)	-3.61** (1.30)	0.93 (2.53)	8.58** (1.79)	-15.68** (3.54)	7.29* (3.39)
	Male	-2.72 (3.69)	-4.63* (2.03)		12.64** (2.88)	-19.03** (5.03)	13.58* (5.43)
	Female	-4.88 (3.35)	-2.74 (1.67)		5.41* (2.14)	-12.39** (4.72)	2.62 (4.22)
<i>sincerity</i>	All	-4.52 ⁺ (2.58)	-1.89 (1.30)	1.13 (2.69)	1.62 (1.86)	-6.82 ⁺ (3.95)	-2.22 (3.42)
	Male	-5.01 (4.08)	-1.89 (2.18)		-0.52 (3.07)	-4.29 (6.71)	-5.73 (4.93)
	Female	-4.16 (3.34)	-1.65 (1.66)		3.49 ⁺ (2.20)	-9.23 ⁺ (4.67)	0.91 (4.59)
<i>fairness</i>	All	-4.13 ⁺ (2.67)	0.41 (0.93)	0.76 (2.64)	-2.48 (1.63)	0.08 (4.42)	-8.36** (3.17)
	Male	-1.04 (4.31)	0.75 (1.21)		-6.04* (2.59)	9.23 (7.32)	-11.32* (4.71)
	Female	-4.76 (3.38)	-0.00 (1.51)		0.06 (2.15)	-4.86 (5.69)	-4.66 (4.13)
<i>modesty</i>	All	-4.22 ⁺ (2.56)	2.30* (1.22)	1.20 (2.59)	-6.55** (1.78)	4.69 (3.69)	-13.14** (3.35)
	Male	-3.00 (3.80)	3.90* (1.86)		-11.05** (2.88)	11.26* (5.52)	-17.28** (5.10)
	Female	-4.80 ⁺ (3.39)	1.04 (1.62)		-2.94 (2.12)	-0.61 (4.94)	-8.99* (4.10)
<i>greedAvoid</i>	All	-4.42 ⁺ (2.59)	1.51 (1.24)	1.05 (2.59)	-4.55* (1.82)	2.08 (4.07)	-10.94** (3.21)
	Male	-3.44 (3.90)	2.20 (2.00)		-7.38* (2.83)	6.81 ⁺ (6.09)	-13.70** (4.94)
	Female	-4.82 ⁺ (3.36)	0.86 (1.55)		-2.08 (2.27)	-1.76 (5.40)	-7.88* (3.94)

Note: This table presents moderated regression analyses examining how personality traits affect the relationship between *negOut* (vs. *posOut*) and self-allocation behavior. For each personality trait, we report the main effects and interaction with the experimental condition, controlling for age and gender. For each trait, “trait -1SD” and “trait +1SD” show simple slope analyses evaluating the effect of experimental condition at one standard deviation below and above the mean of the moderating trait. Robust standard errors in parentheses. The sample consists of 260 participants (130 males and 130 females). ⁺ $p < .10$, * $p < .05$, ** $p < .01$.

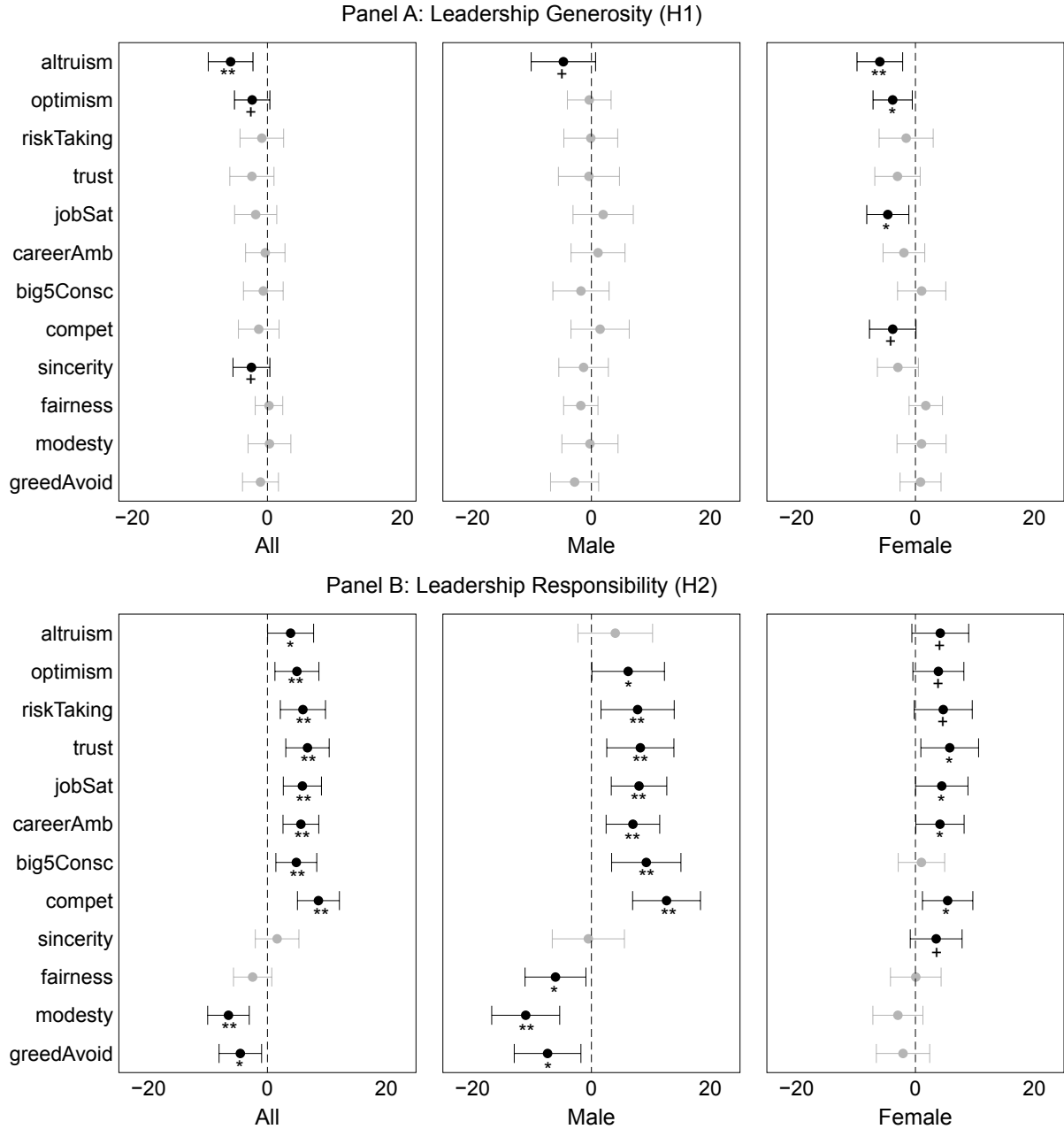


Figure A3: Interaction Effects of Personality Traits on Leadership Styles

Note: These figures show the estimated interaction coefficients between personality traits and treatment indicators with their 95% confidence intervals. The left panel shows results for the full sample, while the middle and right panels show results for male and female subsamples. The top figure (panel A) presents interactions with the pre-project condition (H1: Leadership Generosity), and the bottom figure (panel B) presents interactions with the negative outcome condition (H2: Leadership Responsibility). Positive (negative) coefficients indicate that leaders with higher levels of the trait show stronger (weaker) generosity or responsibility effects. For example, in Panel A, the significant negative coefficient for altruism in the full sample (-5.45) indicates that leaders with altruism one point above the mean reduce their self-allocation by 5.45 percentage points more in the pre-project condition compared to the post-project condition. Similarly, in Panel B, the significant positive coefficient for competitiveness (8.58) suggests that leaders with competitiveness one point above the mean increase their self-allocation by 8.58 percentage points more in the negative outcome condition compared to the positive outcome condition. $^+p < .10$, $*p < .05$, $**p < .01$.

Table A9: Moderation of Age on H1 and H2

Sample	H1: Generosity			H2: Responsibility		
	<i>preProj</i>	<i>age</i>	<i>preProj</i> × <i>age</i>	<i>negOut</i>	<i>age</i>	<i>negOut</i> × <i>age</i>
All	-0.26 (1.55)	0.03 (0.99)	0.04 (0.14)	-6.76** (1.79)	-0.07 (0.12)	0.14 (0.17)
Male	1.87 (2.35)	-0.11 (0.14)	0.09 (0.21)	-7.17* (2.98)	-0.06 (0.19)	-0.01 (0.26)
Female	-2.23 (1.86)	0.16 (0.13)	-0.09 (0.18)	-6.98** (2.26)	-0.09 (0.16)	0.22 (0.22)

Note: This table presents results from robust regression examining how the effects of generosity (H1) and responsibility (H2) on self-allocation are moderated by age. Age has been mean-centered prior to analysis. We find no significant moderating effects of *age* on either H1 or H2. Robust standard errors are reported in parentheses. Female dummy is included in the “All” sample regression but not reported. ** $p < .01$, * $p < .05$, + $p < .10$.

Table A10: Moderation of “Employment Ice Age” on H1 and H2

Sample	H1: Generosity			H2: Responsibility		
	<i>preProj</i>	<i>iceAge</i>	<i>preProj</i> × <i>iceAge</i>	<i>negOut</i>	<i>iceAge</i>	<i>negOut</i> × <i>iceAge</i>
All	-1.39 (1.93)	-0.88 (2.26)	2.89 (3.18)	-7.76** (2.21)	-0.79 (2.59)	3.63 (3.67)
Male	-0.83 (2.94)	-5.84+ (3.48)	7.60 (4.84)	-8.02* (3.84)	-2.30 (4.26)	1.71 (6.07)
Female	-2.22 (2.29)	1.60 (2.64)	-0.85 (3.77)	-8.07** (2.74)	0.82 (3.41)	3.93 (4.83)

Note: This table presents results from robust regression examining how the effects of generosity (H1) and responsibility (H2) on self-allocation are moderated by ice-age generation. The variable *iceAge* is a dummy variable that equals one if the respondent was born during Japan’s Employment Ice Age generation (1970-1983) and zero otherwise. Robust standard errors are reported in parentheses. Female dummy is included in the “All” sample regression but not reported. ** $p < .01$, * $p < .05$, + $p < .10$.

Table A11: Regression Results for Self-Allocation Motivations by Experimental Group

	preProj			postProj			negOut			posOut		
	All	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female
<i>motivateMember</i>	-0.44 (0.99)	-1.63 (1.72)	0.55 (0.89)	-	-	-	-	-	-	-	-	-
<i>socialImage</i>	-3.71** (1.31)	-4.87* (2.11)	-3.04* (1.14)	1.75 ⁺ (0.98)	0.65 (1.60)	2.38 ⁺ (1.26)	1.74 (1.48)	0.36 (1.48)	0.10 (2.33)	-1.75 (1.24)	-0.90 (2.11)	-1.95 (1.43)
<i>selfBenefit</i>	4.14** (1.18)	6.40** (1.90)	3.03* (1.31)	3.49** (0.90)	3.63** (1.33)	2.90* (1.28)	4.98** (1.43)	5.87** (1.69)	1.91 (1.91)	3.05* (1.00)	2.62 (1.67)	3.38** (1.23)
<i>memberBenefit</i>	-1.35 (1.14)	2.05 (1.76)	-4.01** (1.31)	0.01 (1.27)	-0.24 (2.10)	0.51 (1.56)	-3.08* (1.35)	-7.82** (1.68)	4.58* (2.23)	-3.35** (1.25)	-4.08* (1.95)	-2.93 ⁺ (1.57)
<i>age</i>	0.05 (0.10)	-0.19 (0.18)	0.13 (0.09)	0.00 (0.14)	-0.18 (0.19)	0.21 (0.19)	-0.33* (0.16)	-0.36 ⁺ (0.20)	-0.17 (0.20)	-0.19 (0.15)	-0.32 (0.22)	-0.05 (0.23)
<i>female</i>	-4.68 ⁺ (2.70)			1.08 (2.89)			-3.43 (4.16)			1.06 (3.12)		
<i>R</i> ²	0.18	0.22	0.31	0.12	0.11	0.16	0.18	0.39	0.18	0.15	0.20	0.12
<i>N</i>	130	65	65	130	65	65	130	65	65	130	65	65

Note: Results show that encouraging team members' effort (*motivateMember*) had a minimal effect in the pre-project condition (All: -0.44, n.s.), suggesting it does not meaningfully influence self-allocation decisions. Across conditions, men and women responded differently to project outcomes. In the *negOut* condition, male leaders significantly reduced self-allocation when focusing on member benefits (*memberBenefit*: -7.82**), while female leaders showed the opposite effect (*memberBenefit*: 4.58*). Additionally, after successful outcomes (*posOut*), self-benefit (*selfBenefit*) remained a significant predictor for female leaders (3.38**) but not for male leaders (2.62, n.s.). Robust standard errors in parentheses. ⁺ $p < .10$, * $p < .05$, ** $p < .01$.

B Survey Questionnaire: English-Translated Version

For all conditions:

█ Please indicate your gender.

1 Male

2 Female

█ Please indicate your age.

years old

█ Please indicate your occupation.

1 Regular employee (non-managerial)

2 Regular employee (managerial)

3 Company executive (president/officer)

4 Public servant/teacher/non-profit organization employee

5 Temporary/contract worker

6 Self-employed (freelancer/service provider)

7 SOHO

8 Agriculture/fishery

9 Professional (lawyer/accountant/medical)

10 Part-time/casual worker

11 Housewife/househusband

12 Student

13 Unemployed

14 Other occupation

For all conditions:

Q01
Please indicate how well each of the following statements describes you.

	Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree
1 I do good deeds without expecting anything in return.	1 <input type="radio"/>	2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>	5 <input type="radio"/>	6 <input type="radio"/>	7 <input type="radio"/>
2 I am optimistic about the future.	1 <input type="radio"/>	2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>	5 <input type="radio"/>	6 <input type="radio"/>	7 <input type="radio"/>
3 I am not afraid to take risks.	1 <input type="radio"/>	2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>	5 <input type="radio"/>	6 <input type="radio"/>	7 <input type="radio"/>
4 I generally assume that people have good intentions.	1 <input type="radio"/>	2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>	5 <input type="radio"/>	6 <input type="radio"/>	7 <input type="radio"/>
5 I feel a high level of satisfaction with my current job.	1 <input type="radio"/>	2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>	5 <input type="radio"/>	6 <input type="radio"/>	7 <input type="radio"/>
6 I value promotion and success in my work.	1 <input type="radio"/>	2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>	5 <input type="radio"/>	6 <input type="radio"/>	7 <input type="radio"/>
7 I tend to be disorganized and careless.	1 <input type="radio"/>	2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>	5 <input type="radio"/>	6 <input type="radio"/>	7 <input type="radio"/>
8 Competition brings the best out of me.	1 <input type="radio"/>	2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>	5 <input type="radio"/>	6 <input type="radio"/>	7 <input type="radio"/>
9 I would not try to gain promotions through flattery, even if it might be effective.	1 <input type="radio"/>	2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>	5 <input type="radio"/>	6 <input type="radio"/>	7 <input type="radio"/>
10 If I know I'll never get caught, I'd steal 100 million yen.	1 <input type="radio"/>	2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>	5 <input type="radio"/>	6 <input type="radio"/>	7 <input type="radio"/>
11 I have a right to be respected more than the average person.	1 <input type="radio"/>	2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>	5 <input type="radio"/>	6 <input type="radio"/>	7 <input type="radio"/>
12 I get a lot of enjoyment from owning expensive, luxurious things.	1 <input type="radio"/>	2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>	5 <input type="radio"/>	6 <input type="radio"/>	7 <input type="radio"/>
13 I am thorough and strict with myself.	1 <input type="radio"/>	2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>	5 <input type="radio"/>	6 <input type="radio"/>	7 <input type="radio"/>

For all conditions:

Q02

Suppose there is a “Speed Lottery” that has a 50% chance of winning 10,000 yen and a 50% chance of winning nothing.

How much would you be willing to pay to purchase this lottery ticket?

Please indicate the maximum price you would consider paying.

yen

Q03

Suppose a major earthquake has occurred in Japan.

While your area suffered no damage, there are other regions that experienced severe damage.

If you had 100,000 yen in unexpected money at this time, how much would you be willing to donate for disaster recovery?

yen

Next

0 50 100(%)

For pre-project decision (*preProj*) condition:

The following describes a hypothetical scenario. Please read it carefully as you will be asked questions about it afterwards.

You are the leader of a three-member team, including yourself, at your job and you are about to embark on a new team project.

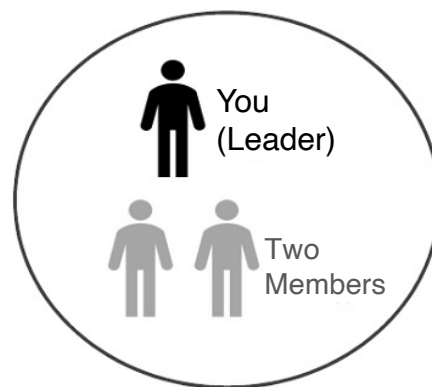
As the leader, not only are you advancing the project, but you are also entrusted with the most responsible roles, such as the overall management of the team's work, member motivation management, and decision-making for the distribution of rewards.

If everyone in the team puts in more effort, the project can generate larger profits. With maximum effort from everyone, the project could yield a profit of up to 6 million yen (approximately 40,000 dollars), but with inadequate effort, it might only produce a minimum of 600,000 yen (approximately 4,000 dollars).

Now, **at the meeting before the start of this project**, you are about to declare in front of the two members how the profits expected from this project will be divided as rewards between yourself and the two members.

You have the authority to determine your share of rewards, with the remainder split equally between the two members. For instance, you might take 50% for yourself, leaving 25% for each member. Note that your allocation decision may influence everyone's motivation and effort levels in the project.

Once announced, this decision is binding for all parties - the team members must accept your allocation, and you cannot modify it later. After this project concludes, the team will be disbanded, and there will be no future collaboration opportunities with these team members.



Project Team

For post-project decision (*postProj*) condition:

The following describes a hypothetical scenario. Please read it carefully as you will be asked questions about it afterwards.

You are the leader of a three-member team, including yourself, at your job and you are about to embark on a new team project.

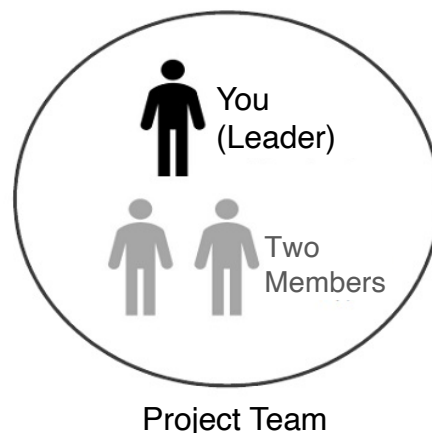
As the leader, not only are you advancing the project, but you are also entrusted with the most responsible roles, such as the overall management of the team's work, member motivation management, and decision-making for the distribution of rewards.

If everyone in the team puts in more effort, the project can generate larger profits. With maximum effort from everyone, the project could yield a profit of up to 6 million yen (approximately 40,000 dollars), but with inadequate effort, it might only produce a minimum of 600,000 yen (approximately 4,000 dollars).

Now, **the project period has ended**, and all that is left is to wait and see how much profit the project will generate. At the meeting, you are about to declare in front of the two members how the profits expected from this project will be divided as rewards between yourself and the two members.

You have the authority to determine your share of rewards, with the remainder split equally between the two members. For instance, you might take 50% for yourself, leaving 25% for each member. Your allocation decision will not affect the project's outcome.

Once announced, this decision is binding for all parties - the team members must accept your allocation, and you cannot modify it later. After this project concludes, the team will be disbanded, and there will be no future collaboration opportunities with these team members.



For positive outcome (*posOut*) condition:

The following describes a hypothetical scenario. Please read it carefully as you will be asked questions about it afterwards.

You are the leader of a three-member team, including yourself, at your job and you are about to embark on a new team project.

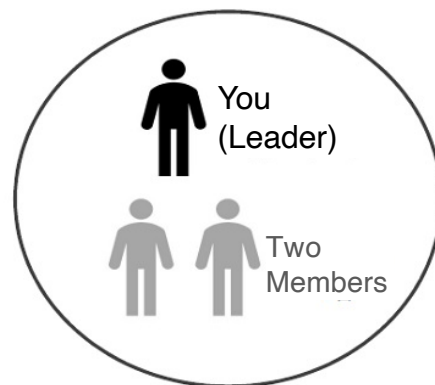
As the leader, not only are you advancing the project, but you are also entrusted with the most responsible roles, such as the overall management of the team's work, member motivation management, and decision-making for the distribution of rewards.

If everyone in the team puts in more effort, the project can generate larger profits. With maximum effort from everyone, the project could yield a profit of up to 6 million yen (approximately 40,000 dollars), but with inadequate effort, it might only produce a minimum of 600,000 yen (approximately 4,000 dollars).

Now, **the project has ended with the best possible outcome**, generating a profit of 6 million yen. At the final meeting, you are about to declare in front of the two members how the profits earned from this project will be divided as rewards between yourself and the two members.

You have the authority to determine your share of rewards, with the remainder split equally between the two members. For instance, you might take 50% for yourself, leaving 25% for each member.

Once announced, this decision is binding for all parties - the team members must accept your allocation, and you cannot modify it later. After this project concludes, the team will be disbanded, and there will be no future collaboration opportunities with these team members.



Project Team

For negative outcome (*negOut*) condition:

The following describes a hypothetical scenario. Please read it carefully as you will be asked questions about it afterwards.

You are the leader of a three-member team, including yourself, at your job and you are about to embark on a new team project.

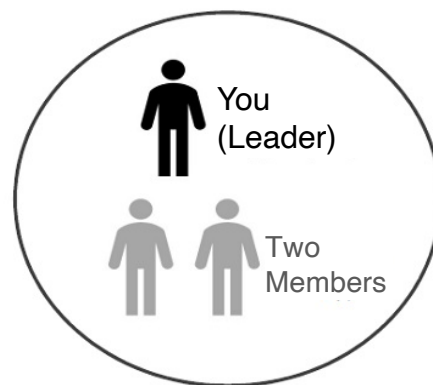
As the leader, not only are you advancing the project, but you are also entrusted with the most responsible roles, such as the overall management of the team's work, member motivation management, and decision-making for the distribution of rewards.

If everyone in the team puts in more effort, the project can generate larger profits. With maximum effort from everyone, the project could yield a profit of up to 6 million yen (approximately 40,000 dollars), but with inadequate effort, it might only produce a minimum of 600,000 yen (approximately 4,000 dollars).

Now, **unfortunately, the project has ended with the worst possible outcome**, generating a profit of only 600,000 yen. At the final meeting, you are about to declare in front of the two members how the profits earned from this project will be divided as rewards between yourself and the two members.

You have the authority to determine your share of rewards, with the remainder split equally between the two members. For instance, you might take 50% for yourself, leaving 25% for each member.

Once announced, this decision is binding for all parties - the team members must accept your allocation, and you cannot modify it later. After this project concludes, the team will be disbanded, and there will be no future collaboration opportunities with these team members.



Project Team

For all conditions:

Q04

As the leader of this team, what do you think you would decide for your own reward, as well as the rewards for the members, and how would you announce this in front of the members at this meeting? Please specify the percentage of the total rewards that you would take for yourself, between 0 to 100.

You will receive % of the total rewards. (yen)

Each member will receive

% of the total rewards. (yen)

Next

0 50 100(%)

Q05

In the scenario you just read, at what timing did you as a leader decide and announce the reward allocation to members?

- 1 Before the project started
- 2 After the project ended, but before knowing the results
- 3 After the project ended and results were known
- 4 Don't remember


Next

0 50 100(%)

For all conditions (item 2 applicable to pre-project condition only):

Q06

Please indicate your reasons for choosing that reward allocation.



Strongly agree
Agree
Somewhat agree
Neutral
Somewhat disagree
Disagree
Strongly disagree

1	Because I want team members to view me favorably	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	Because I want to motivate team members to put in greater effort	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	Because I wanted to secure a larger share for myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	Because I wanted to give more to the members	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[Next](#)

0 50 100(%)

For pre-project and post-project decision (*preProj* and *postProj*) conditions:

Q07

Please share your thoughts about this project's outcome.

Q07_1

For this project to succeed, which do you think is more important - your efforts as a leader or the members' efforts?

Leader's efforts important	←	Equally important	→	Member's effort important
1	2	3	4	5
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

For positive outcome (*posOut*) condition:

Q07
Please share your thoughts about this project's outcome.

Q07_2
As factors in the project's success, which was more important - your efforts as a leader or the members' efforts?

Leader's efforts important	←	Equally important	→	Member's efforts important
1	2	3	4	5
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

For negative outcome (*negOut*) condition:

Q07
Please share your thoughts about this project's outcome.

Q07_3
As factors in the project's failure, which was more important - your lack of effort as a leader or the members' lack of efforts?

Leader's lack of effort important	←	Equally important	→	Member's lack of effort important
1	2	3	4	5
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

C Survey Questionnaire: Original (Japanese) Version

For all conditions:

■ あなたの性別をお知らせください。

1 男性

2 女性

■ あなたの年齢をお知らせください。

歳

■ あなたの職業をお知らせください。

1 会社勤務(一般社員)

2 会社勤務(管理職)

3 会社経営(経営者・役員)

4 公務員・教職員・非営利団体職員

5 派遣社員・契約社員

6 自営業(商工サービス)

7 SOHO

8 農林漁業

9 専門職(弁護士・税理士等・医療関連)

10 パート・アルバイト

11 専業主婦・主夫

12 学生

13 無職

14 その他の職業

For all conditions:

Q01

以下の項目があなた自身にどのくらい当てはまるかについて、もっとも適切なものを選んでください。(それぞれひとつずつ)



まったくそう
思わない
そう
思わない
やや
そう
思わない
どちら
とも
いえ
ない
やや
そう
思
う
そう
思
う
と
も
そ
う
思
う

- | | | | | | | | | |
|----|---|---|---|---|---|---|---|---|
| 1 | 私は見返りを期待することなく、善い行いをする。 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2 | 私は未来に対して楽観的である。 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3 | 私は普段、リスクを取ることを恐れない。 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4 | 周りの人間は善意をもって生きていると思う。 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5 | 私は自分の仕事に対して高い満足感を感じている。 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6 | 私は自分の仕事における昇進や成功を重要視している。 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7 | 私はだらしなく、うっかりしていると思う。 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 競争が私の能力を最大限に引き出すと思う。 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9 | たとえそうすればうまくいくと思っても、仕事の上で昇進するためにお世辞を言ったりしようとは思わない。 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10 | もし決して捕まらなるとわかっているのなら、私は1億円を盗もうと思う。 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11 | 私は、平均的な人間よりも、尊重される権利があると思う。 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12 | 私は高価で贅沢なものを所有することで、多くの楽しみが得られる。 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13 | 私はしっかりしていて、自分に厳しいと思う。 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |



まったくそう
思わない
そう
思わない
やや
そう
思
う
どちら
とも
いえ
ない
やや
そう
思
う
そう
思
う
と
も
そ
う
思
う

次へ

For all conditions:

Q02

確率 50% で1万円が当たり、確率 50%で何ももらえない「スピードくじ」があるとします。

あなたはその「スピードくじ」が、何円以下であれば購入しますか。

購入してもよいと考えるギリギリ高い価格をお答えください。

円

Q03

今、日本において大きな規模の地震が発生したとします。

あなたが住んでいる場所は被害は全くありませんでしたが、壊滅的な被害を被った地方があるとします。

このとき、ちょうどあなたに10万円の思わぬ臨時収入があったならば、あなたはこの10万円のうち、災害復興のためにいくらまでなら寄付できると思いますか？

円

次へ

0 50 100(%)

For pre-project decision (*preProj*) condition:

以下のシナリオ(仮想的な状況)をよく読んで、後の質問にお答えください。
文章の内容について、後ほど質問がございますので、文章の内容をよくご覧ください。

あなたは、自身の仕事において、あなたを含め3名からなるチームのリーダーとして、新しいチームプロジェクトに取り組むことになりました。

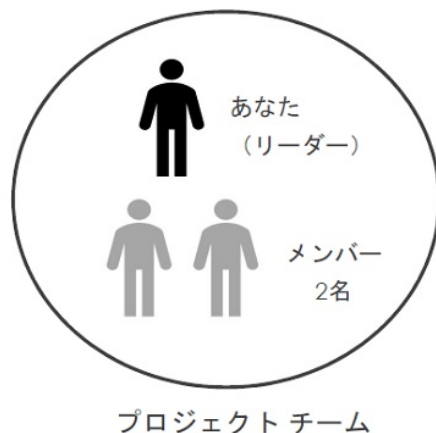
リーダーであるあなたは、プロジェクトを進めるだけでなく、そのチームの仕事の全体的な管理やメンバーのモチベーション管理、報酬の配分決定など、最も責任が重く、また他のメンバーよりも多くの労力が必要な役を任せられました。

このチームの全員がより多くの努力を注ぐことができれば、プロジェクトはより大きな収益を生み出します。全員が最大限の努力を注げばプロジェクトは最高で 600 万円の収益を生み出しますが、適切な努力を注がなければ最低ラインの60万円の収益しか生み出さないかもしれません。

今、あなたは【このプロジェクト開始前のミーティング】にて、このプロジェクトから得られるであろう収益を、報酬としてリーダーである自らとメンバー2人に対してどのように分けるのかについて、メンバー2人の前で宣言することになりました。

あなた以外の 2人のメンバーの取り分は等しくなるようにして、あなた自身の報酬の取り分について、あなた自身が自由に決めることができます。(例えばあなたが報酬の 50% を、他のメンバーが 25% ずつ、など)。当然、あなたが宣言する報酬の配分次第で、あなた及びメンバーのプロジェクトへのモチベーションや努力水準は影響を受ける可能性があります。

他のメンバーはその決定に従う以外の方法はなく、あなたもこの決定を後から覆すことはできません。このチームは、このプロジェクトが終わり次第解散となり、今後それらのメンバーとともに仕事をする機会はないものとします。



For post-project decision (*postProj*) condition:

以下のシナリオ(仮想的な状況)をよく読んで、後の質問にお答えください。
文章の内容について、後ほど質問がございますので、文章の内容をよくご覧ください。

あなたは、自身の仕事において、あなたを含め3名からなるチームのリーダーとして、新しいチームプロジェクトに取り組むことになりました。

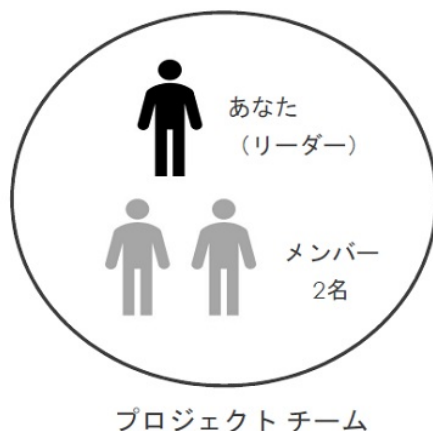
リーダーであるあなたは、プロジェクトを進めるだけでなく、そのチームの仕事の全体的な管理やメンバーのモチベーション管理、報酬の配分決定など、最も責任が重く、また他のメンバーよりも多くの労力が必要な役を任せられました。

このチームの全員がより多くの努力を注ぐことができれば、プロジェクトはより大きな収益を生み出します。全員が最大限の努力を注げばプロジェクトは最高で600万円の収益を生み出しますが、適切な努力を注がなければ最低ラインの60万円の収益しか生み出さないかもしれません。

今、【このプロジェクトの期間が終わり】残すはそのプロジェクトの収益がいくらになるのかを待つのみとなりました。あなたはミーティングにて、このプロジェクトから得られるであろう収益を、報酬としてリーダーである自らと2人のメンバーに対してどのように分けるのかについてメンバー2人の前で宣言することになりました。

あなた以外の2人のメンバーの取り分は等しくなるようにして、あなた自身の報酬の取り分について、あなた自身が自由に決めることができます。(例えばあなたが報酬の50%を、他のメンバーが25%ずつ、など)。あなたが宣言する報酬の配分によって、このプロジェクトの成果に影響を及ぼすことはありません。

他のメンバーはその決定に従う以外の方法はなく、あなたもこの決定を後から覆すことはできません。このチームは、このプロジェクトが終わり次第解散となり、今後それらのメンバーとともに仕事をする機会はないものとします。



For positive outcome (*posOut*) condition:

以下のシナリオ(仮想的な状況)をよく読んで、後の質問にお答えください。
文章の内容について、後ほど質問がございますので、文章の内容をよくご覧ください。

あなたは、自身の仕事において、あなたを含め3名からなるチームのリーダーとして、新しいチームプロジェクトに取り組むことになりました。

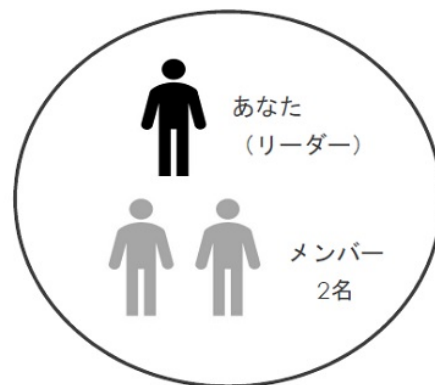
リーダーであるあなたは、プロジェクトを進めるだけでなく、そのチームの仕事の全体的な管理やメンバーのモチベーション管理、報酬の配分決定など、最も責任が重く、また他のメンバーよりも多くの労力が必要な役を任せられました。

このチームの全員がより多くの努力を注ぐことができれば、プロジェクトはより大きな収益を生み出します。全員が最大限の努力を注げばプロジェクトは最高で600万円の収益を生み出しますが、適切な努力を注がなければ最低ラインの60万円の収益しか生み出さないかもしれません。

今、【このプロジェクトは見事、最高の結果に終わり】600万円の収益を得ることができました。最後のミーティングにて、このプロジェクトから得られた収益を、報酬としてリーダーである自らと2人のメンバーに対してどのように分けるのかについてメンバー2人の前で宣言することになりました。

あなた以外の2人のメンバーの取り分は等しくなるようにして、あなた自身の報酬の取り分について、あなた自身が自由に決めることができます。(例えばあなたが報酬の50%を、他のメンバーが25%ずつ、など)。

他のメンバーはその決定に従う以外の方法はなく、あなたもこの決定を後から覆すことはできません。このチームは、このプロジェクトが終わり次第解散となり、今後それらのメンバーとともに仕事をする機会はないものとします。



プロジェクトチーム

For negative outcome (*negOut*) condition:

以下のシナリオ(仮想的な状況)をよく読んで、後の質問にお答えください。
文章の内容について、後ほど質問がございますので、文章の内容をよくご覧ください。

あなたは、自身の仕事において、あなたを含め3名からなるチームのリーダーとして、新しいチームプロジェクトに取り組むことになりました。

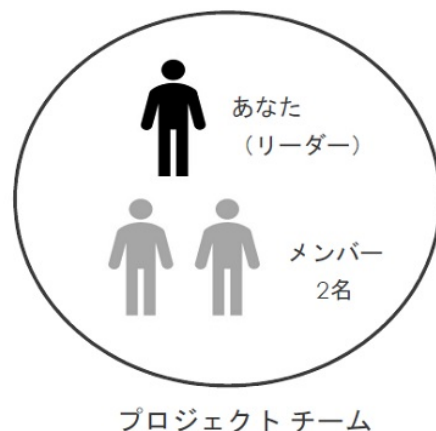
リーダーであるあなたは、プロジェクトを進めるだけでなく、そのチームの仕事の全体的な管理やメンバーのモチベーション管理、報酬の配分決定など、最も責任が重く、また他のメンバーよりも多くの労力が必要な役を任せられました。

このチームの全員がより多くの努力を注ぐことができれば、プロジェクトはより大きな収益を生み出します。全員が最大限の努力を注げばプロジェクトは最高で600万円の収益を生み出しますが、適切な努力を注がなければ最低ラインの60万円の収益しか生み出さないかもしれません。

今、【このプロジェクトは残念ながら、最低の結果に終わり】60万円の収益を得ることになりました。最後のミーティングにて、このプロジェクトから得られた収益を、報酬としてリーダーである自らと2人のメンバーに対してどのように分けるのかについてメンバー2人の前で宣言することになりました。

あなた以外の2人のメンバーの取り分は等しくなるようにして、あなた自身の報酬の取り分について、あなた自身が自由に決めることができます。(例えばあなたが報酬の50%を、他のメンバーが25%ずつ、など)。

他のメンバーはその決定に従う以外の方法はなく、あなたもこの決定を後から覆すことはできません。このチームは、このプロジェクトが終わり次第解散となり、今後それらのメンバーとともに仕事をする機会はないものとします。



For all conditions:

Q04

あなたがこのチームのリーダーとして、このミーティングで自分とメンバーの報酬配分をどのように決定し、それをメンバーに発表するかを教えてください。

全体の報酬からあなたが受け取る割合を0%から100%の範囲で具体的に教えてください。

あなたは全収益の %を得る (万円)

各メンバーは全収益の

%を得る (万円)

次へ

0 50 100(%)

Q05

先ほど読んでいただいたシナリオにおいて、あなたがリーダーとして報酬の配分を決定してメンバーに伝えたのはどのタイミングでしたか。

- 1 プロジェクトが開始する前
- 2 プロジェクトが終了し、プロジェクトの結果が判明する前
- 3 プロジェクトが終了し、結果が判明した後
- 4 覚えていない

次へ

0 50 100(%)

For all conditions (item 2 applicable to pre-project condition only):

Q06

先ほどの問いにおいて、あなたがそのような報酬の配分を選んだ理由についてお答えください。(それぞれひとつずつ)



ま	あ	や	ど	や	あ	と
っ	て	や	ち	や	て	も
た	は	あ	ら	あ	は	あ
く	ま	て	と	て	ま	て
あ	ら	は	も	は	る	は
て	な	ま	い	ま		ま
は	い	ら	え	る		る
ま		な	な			
ら		い	い			
な						

- | | | | | | | | | |
|---|------------------------|---|---|---|---|---|---|---|
| 1 | 自分のことをメンバーから良く思われたいから。 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2 | メンバーのより大きな努力を引き出したいから。 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3 | 自分の取り分をより多くしたいから。 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4 | メンバーの取り分をより多くしたいから。 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

次へ



For pre-project and post-project decision (*preProj* and *postProj*) conditions:

Q07

このプロジェクトの成否についてのあなたの考えをお答えください。

Q07_1

このプロジェクトが成功するために、リーダーとしての自らの努力と、メンバーの努力のどちらが重要だと想像しますか。

リ ー ダ ー の 努 力 が 重 要	←	ど ち ら も 同 程 度 重 要	→	メ ン バ ー の 努 力 が 重 要
1	2	3	4	5
1 ○	2 ○	3 ○	4 ○	5 ○

For positive outcome (*posOut*) condition:

Q07

このプロジェクトの成否についてのあなたの考えをお答えください。

Q07_2

プロジェクトが成功した原因として、リーダーとしての自らの努力と、メンバーの努力のどちらが重要だったと想像しますか。

リ ー ダ ー の 努 力 が 原 因	←	ど ち ら も 同 程 度 重 要	→	メ ン バ ー の 努 力 が 原 因
1	2	3	4	5
1 ○	2 ○	3 ○	4 ○	5 ○

For negative outcome (*negOut*) condition:

Q07

このプロジェクトの成否についてのあなたの考えをお答えください。

Q07_3

プロジェクトが失敗した原因として、リーダーとしての自らの努力不足と、メンバーの努力不足のどちらが重要だったと想像しますか。

リ ー ダ ー の 努 力 不 足 が 原 因	←	ど ち ら も 同 程 度 重 要	→	メ ン バ ー の 努 力 不 足 が 原 因
1	2	3	4	5
1 ○	2 ○	3 ○	4 ○	5 ○