



Instructor Guide: Hearing, Reasons, and Procedural Justice

Laboratory implementation, theoretical foundations,
experimental evidence, and variants

Behavioral and Experimental Economics Research Lab
Department of Economics



Revised edition | October 2026

<https://beer-lab.org/>

How to use this guide

This guide supports the preparation, implementation, and classroom discussion of the family of hearing and procedural justice games available through the Behavioral and Experimental Economics Research Lab (BEER Lab) at the Department of Economics of Tecnológico de Monterrey. It is intended for instructors with different levels of familiarity with experimental and behavioral economics.

The document offers three reading paths. The **quick guide** is enough to launch a session. The operational chapters explain each screen used by instructors and students. The conceptual chapters present the theories, predictions, and empirical findings needed to lead the post-game discussion.

Access instructions and common screens are explained once. Each variant then focuses only on what changes relative to the basic game: configuration, group size, decisions, predictions, relevant outcomes, and academic literature.

Author

This guide was prepared by Stanislaw Maldonado, research professor in the Department of Economics at Tecnológico de Monterrey, Monterrey Campus. For questions or suggestions about its content, please contact the author at stanislao.maldonado@tec.mx.

For the instructor

This guide follows the English-language interface. Spanish configurations use the same logic. Never project individual codes or connect outcomes to names, student identification numbers, or seats in the room.

Contents

How to use this guide	i
1 Purpose and preparation	1
1.1 Access through the updated laboratory website	1
1.2 What the class will learn	3
1.3 Preparation that protects the comparison	8
1.4 Instructor and participant access	9
2 Sequence and accounts	10
2.1 What happens during an encounter	10
2.2 Reference accounting	12
3 Theory and institutions	14
3.1 A monetary starting point	14
3.2 Behavioral interpretations	15
3.3 What the literature contributes	15
3.4 Hearing and explanation	16
3.5 Predecision voice and effective authority	16
3.6 Imperfect records and review	17
3.7 Consistency and authority selection	19
4 Report and discussion	21
4.1 Disclosure and the observational unit	21
4.2 Reading each display	22
4.3 A hypothetical reading exercise	23
5 Teaching, assessment and data	24
5.1 A sixty-minute class	24
5.2 An advanced ninety-minute class	24
5.3 Solved exercises	25
5.3.1 Reconstructing a review	25
5.3.2 Comparing levels and distributions	26
5.3.3 Finding the denominator	26
5.3.4 Recognizing selection after treatment	26
5.3.5 Stability and risk	26
5.4 A learning rubric	26
5.5 Export and reproducible analysis	27
5.6 Privacy and retention	27
5.7 Common problems and recovery	27

List of Figures

1.1	Current institutional website. Select CLASSROOM in the top navigation menu to open the teaching experiments. Captured on October 7, 2026.	1
1.2	Current catalog: search by title, topic, or JEL code. Then locate this family's card and select language and edition. Captured on October 7, 2026.	2
1.3	Demo contains only the configurations of this game family, in both languages and editions. Continuation 1/2.	3
1.5	Rooms contains the four rooms for this family: basic and extended editions in Spanish and English.	4
1.6	Current comprehension check: specific feedback explains the incorrect answer and preserves the other responses.	5
1.7	Current basic-edition instructions, with initial resources and experimental units. Continuation 1/2.	6
1.9	Session-creation form for the basic English room. Check the selected configuration and participant requirement before creating the session.	7
2.1	Welcome and common rules.	10
2.2	A private assessment of the procedure.	11
2.3	Complete accounts for an encounter.	13
3.1	A message after a confirmed resolution.	17
3.2	The reviewer chooses the final charge.	18
3.3	A review request with an explicit fee.	19
3.4	Choosing between binding proposals.	20
4.1	The report before aggregate disclosure.	21
4.2	Contribution frequencies.	22
5.1	The subsequent contribution decision.	25
5.2	Explicit closure and accumulated payment.	28

Purpose and preparation

1.1 Access through the updated laboratory website

Start at <https://beer-lab.org/en/>. Select **CLASSROOM** in the top navigation menu; it opens <https://teaching.beer-lab.org/en/>. In the **Classroom experiments** catalog, use the search box to locate the activity by name. You can also filter by **Topic** or **JEL code**. Clear any filters left from an earlier search before looking for another game.

Each family's card distinguishes **Español** and **English** access links. The **Show extended version** checkbox selects that edition before following a link. Catalog language and session language are separate choices: verify both. Students use the room specified by the instructor; the instructor prepares and monitors the session through this family's own administrative pages.

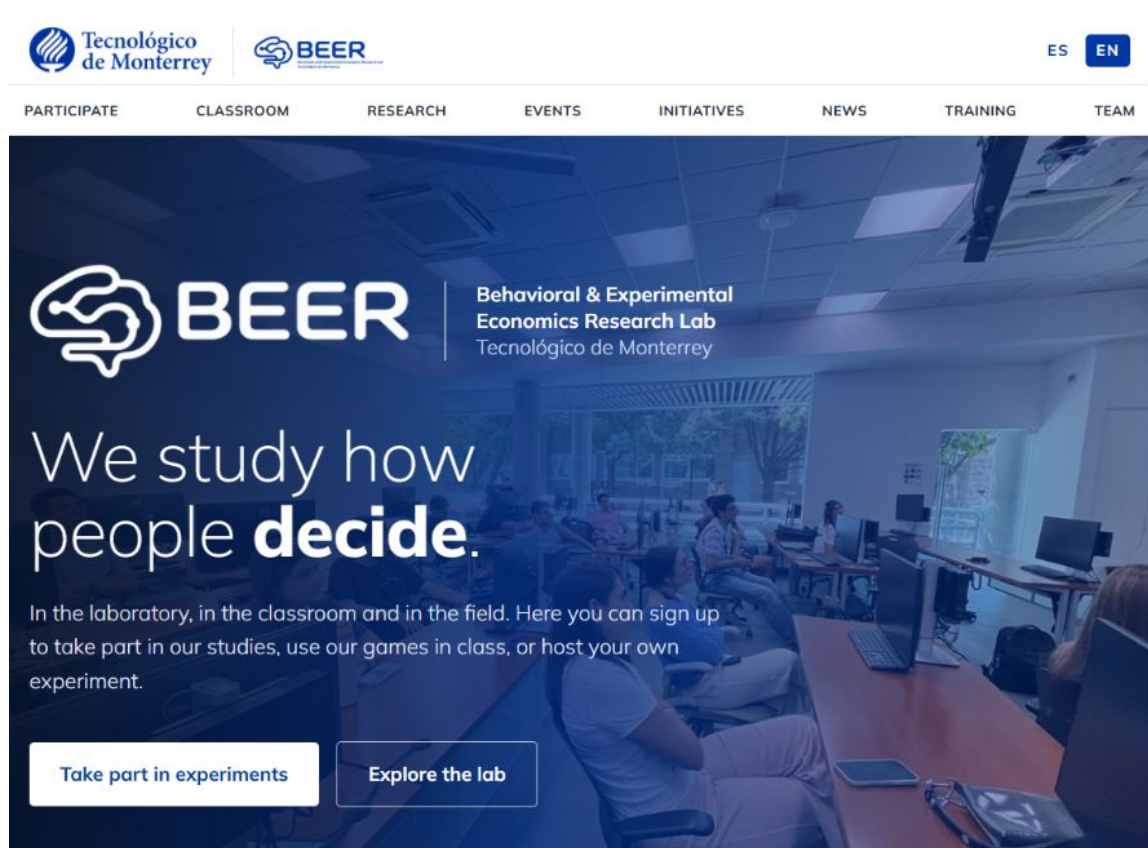


Figure 1.1: Current institutional website. Select CLASSROOM in the top navigation menu to open the teaching experiments. Captured on October 7, 2026.

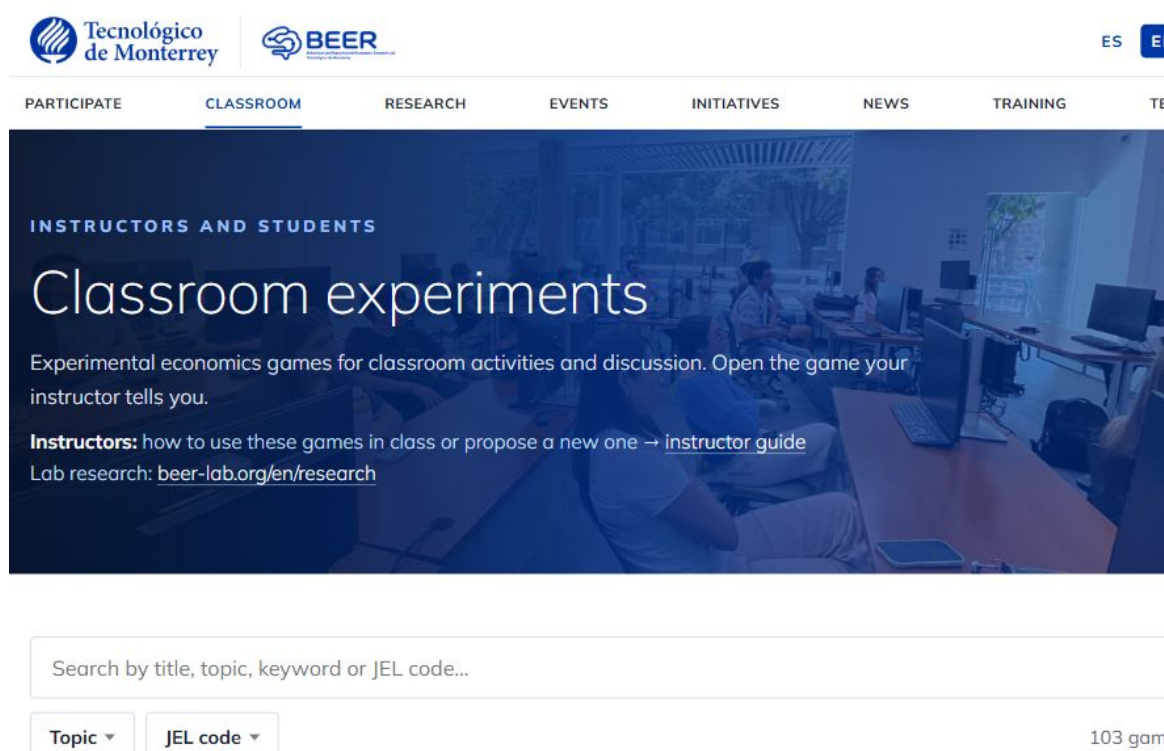


Figure 1.2: Current catalog: search by title, topic, or JEL code. Then locate this family's card and select language and edition. Captured on October 7, 2026.

Checking resources, comprehension, and participant requirements

Before opening the room, check the selected configuration and the number of students present. The session-creation form states the group size and minimum required by that configuration. An individual activity accepts any positive participant count; an interactive activity must satisfy its stated requirement: complete groups when size is fixed, or a minimum participant count when size is flexible. Requirements may change across treatments, for example when adding a third party or changing an institution's size. If you edit a grouping parameter, check the requirement for the edited configuration, rather than relying only on the demo's suggested count.

In the instructions, ensure that students can identify what each role receives, what they can decide, and how the outcome is calculated. An initial account, a distributable budget, and final earnings need not be the same amount. Refer to the resources panel and the example for the selected treatment. Do not carry the basic edition's endowment into a treatment that changes accounts or introduces additional positions.

ECU stands for *Experimental Currency Units*: the activity's unit of account. An outcome of 100 ECU does not automatically equal 100 pesos or 100 dollars. Conversion depends on the session configuration. Before announcing a payment, confirm with the laboratory whether money is paid, the conversion rate, and which decisions count for payment. In hypothetical modules, describe amounts as outcomes in the stated situation.

When a comprehension check is included, an incorrect response receives an explanation beside that question, identifying the submitted answer and the correct answer. Other answers remain in the form. Ask the student to return to the example, locate the relevant rule, and redo the calculation before correcting the response. Avoid revealing answers to the entire class for an individual error, and do not interpret a comprehension mistake as an economic choice in the game.

edimiento · Básica · ES · Una interacción

edimiento · Básica · ES · Diez encuentros fijos

edimiento · Básica · ES · Diez encuentros reasignados

cedure · Basic · EN · One encounter

cedure · Basic · EN · Ten fixed encounters

cedure · Basic · EN · Ten rematched encounters

edimiento · Extendida · ES · Resolución automática

edimiento · Extendida · ES · Audiencia posterior

edimiento · Extendida · ES · Explicación del resultado

edimiento · Extendida · ES · Audiencia posterior y explicación

edimiento · Extendida · ES · Audiencia previa sin modificación

edimiento · Extendida · ES · Audiencia previa con discreción

edimiento · Extendida · ES · Registro imperfecto sin revisión

edimiento · Extendida · ES · Revisión y corrección

edimiento · Extendida · ES · Regla estable para expedientes iguales

edimiento · Extendida · ES · Regla variable para expedientes iguales

edimiento · Extendida · ES · Revisor por sorteo

edimiento · Extendida · ES · Revisor elegido

Audiencia, motivación y justicia procedimental / Hearing, Reasons, and Procedural Justice — BEER Lab

Selecione una variante de este juego. Select a version of this game.

Figure 1.3: Demo contains only the configurations of this game family, in both languages and conditions. Continuation 1/2.

Downloading a session with several rounds

For the instructor

Open **Data** within the relevant session and use that session's CSV or CSV-for-Excel download link. The general export has one row per participant and columns for the different rounds. Ten rounds do not necessarily mean ten rows per person. When the family provides its own long-format export, observations may instead be organized by participant and round or another unit defined by the design.

Save the original file together with the configuration name, session code, and active-round count. Check that columns for the last active round are present and that the data belong to the selected session. Empty cells can represent inactive rounds, a pending decision, or a field that does not apply to a role; do not automatically recode them as zeros. To compare learning, preserve round and group identifiers alongside participant identifiers. Share only anonymous aggregates in class, and record session incidents before constructing derived tables.

cedure · Extended · EN · Variable rule for identical files

1.2 What the class will learn

cedure · Extended · EN · Chosen reviewer

An administrative decision has at least two dimensions that should be separated at the outset: the outcome it imposes and the procedure through which that outcome is reached. A charge of thirty points affects disposable income. An opportunity to express an objection changes the interaction with the person communicating or reviewing the charge. Neither dimension, taken alone, summarizes the quality of a legal institution. This game makes their differences visible

	edimiento · Extendida · ES · Audiencia posterior y explicación
BE	edimiento · Extendida · ES · Audiencia previa sin modificación
	edimiento · Extendida · ES · Audiencia previa con discreción
	edimiento · Extendida · ES · Registro imperfecto sin revisión
	edimiento · Extendida · ES · Revisión y corrección
	edimiento · Extendida · ES · Regla estable para expedientes iguales
	edimiento · Extendida · ES · Regla variable para expedientes iguales
	edimiento · Extendida · ES · Revisor por sorteo
	edimiento · Extendida · ES · Revisor elegido
	cedure · Extended · EN · Automatic resolution
	cedure · Extended · EN · Postdecision hearing
	cedure · Extended · EN · Explanation of the outcome
	cedure · Extended · EN · Postdecision hearing and explanation
	cedure · Extended · EN · Predecision hearing without modification
	cedure · Extended · EN · Predecision hearing with discretion
	cedure · Extended · EN · Imperfect record without review
	cedure · Extended · EN · Review and correction
	cedure · Extended · EN · Stable rule for identical files
	cedure · Extended · EN · Variable rule for identical files
	cedure · Extended · EN · Reviewer by lottery
	cedure · Extended · EN · Chosen reviewer

Figure 1.4: Demo contains only the configurations of this game family, in both languages and editions. Continuation 2/2.

Rooms

Current rooms:

Audiencia y procedimiento · Básica · ES
Hearing and procedure · Basic · EN
Audiencia y procedimiento · Extendida · ES
Hearing and procedure · Extended · EN

Figure 1.5: Rooms contains the four rooms for this family: basic and extended editions in Spanish and English.



Review the marked questions. Each shows your answer and an explanation; your other answers are retained.



Your role: **Applicant** · Encounter 1 / 1

Check the rules

Resources and unit of account

ECU stands for Experimental Currency Units. It is the unit of account for this activity.

This session does not convert ECU into real money.

How many ECU does the applicant start each encounter with?

Your answer: 101. The correct answer is 100. Review the instructions: one or more answers are incorrect. You can try again.

What is the maximum allowed contribution?

How many ECU does the assigned reviewer receive per ECU contributed?

Continue

Con tecnología de oTree

Figure 1.6: Current comprehension check: specific feedback explains the incorrect answer and preserves the other responses.



Your role: **Reviewer A** · Encounter 1 / 1

Instructions

Resources and unit of account

The applicant starts each encounter with 100 ECU and each reviewer with 30 ECU.

ECU stands for Experimental Currency Units. It is the unit of account for this activity.

This session does not convert ECU into real money.

You will complete 1 encounter(s) with the same group. Payments from every encounter are added. Roles do not change.

The applicant starts each encounter with 100 ECU and each reviewer with 30 ECU. The charge goes to an external administrative account; no participant receives it. It is not a sanction for an earlier action.

The program draws a charge of 10 or 30 ECU, each with probability 50%. The reviewer cannot change it. There are no messages or review requests.

After learning the resolution, the applicant answers an unpaid question and may allocate from 0 to 10 ECU to an activity. Each ECU allocated adds 2 ECU to the assigned reviewer. Applicant payment = $100 - \text{charge} - \text{review fee} - \text{contribution}$. Assigned reviewer payment = $30 + 2 \times \text{contribution}$. An unassigned reviewer keeps 30 ECU.

Decisions are anonymous to other people. Only decisions needed for this interaction are shown. Your rating is not shown to your counterpart. Class results are presented in aggregate.

Accounting example

With the higher charge, the maximum contribution and no review request, payments are:

Applicant: **60 ECU**

Reviewer A: **50 ECU**

External administrative account: 30 ECU. Joint increase from the activity: 10 ECU.

Continue

Con tecnología de oTree

Figure 1.8: Current basic-edition instructions, with initial resources and experimental units.
Continuation 2/2.

Room: Hearing and procedure · Basic · EN

Create a new session

Session Config

Hearing and procedure · Basic · EN · One encounter

Number of participants

Use a multiple of 2 participants.

Create

[Configure session](#) 

App sequence

administrative_procedure_game (10 rounds)

Hearing, reasons, correction and administrative procedure

Figure 1.9: Session-creation form for the basic English room. Check the selected configuration and participant requirement before creating the session.

through small decisions, transparent accounts and comparisons that can be discussed without attributing unobserved beliefs to participants.

The activity concerns a fictional administrative file. One person acts as an applicant and another as a reviewer. The program assigns a charge, provides the communication or review opportunities specified by the condition and then requests an assessment of the procedure. Finally, the applicant decides whether to allocate points to an activity that benefits the reviewer. This last decision measures cooperation toward a particular counterpart. It does not directly measure legal compliance, general trust in government or recognition of a moral duty to obey the law.

Purpose	Compare hearing, explanation, review and authority in an individual administrative resolution.
Suggested duration	30–45 minutes of play; 60–90 with discussion, pending a classroom pilot.
Participants	Multiples of two; multiples of three for authority selection.
Experimental unit	Applicant–reviewer pair; three people for authority selection. The institutional condition is assigned by session.
Basic edition	One encounter, ten encounters with a fixed group, or ten with reassignment.
Extended edition	Twelve conditions, including the common control: hearing, explanation, discretion, correction, consistency and reviewer selection.
Decision	Message, acknowledgment, charge where applicable, review request, rating and contribution.
Payoff	Applicant: 100 minus charge, review fee and contribution. Assigned reviewer: 30 plus twice the contribution.
Topics	procedural justice; hearing; reasons for decisions; error review; administrative discretion; authority selection.

JEL

C92; D63; K23; K40.

By the end, students should be able to reconstruct payments, distinguish a hearing from decision authority, identify what information an explanation supplies and recognize when an institutional comparison also changes material outcomes. They should be able to read a histogram with its denominator, explain why ten encounters involving the same pair are not ten independent observations and propose a control that could challenge a competing interpretation. The activity is suitable for introductory law, administrative law, law and economics, and experimental methods courses.

1.3 Preparation that protects the comparison

Choose one principal question before bringing the class together. For an initial session, comparing automatic resolution with a postdecision hearing is sufficient. A course discussing administrative remedies may instead use imperfect records without review versus review and correction. If delegated authority is the focus, compare lottery selection with applicant choice between reviewer proposals. Running every condition in one class usually reduces discussion time and increases experience differences between people playing earlier and later. The twelve conditions are a teaching repertoire, not a requirement to use them simultaneously.

Prepare a participant count divisible by two, or by three for authority selection. Demonstrations create four people for pair conditions and six for the three-person conditions, allowing two groups to be observed. Roles are randomized initially and remain fixed. Fixed matching retains the entire group. Reassignment retains roles and avoids repeating the immediately preceding complete group when several groups exist. With only one group, changing counterpart is impossible. The implementation does not promise that a pair will never meet again later in the session.

Explain what ECU mean in your course before the activity begins. The program calculates points consistently, but does not determine whether they are converted into money, symbolic recognition or an unpaid demonstration. When using monetary incentives, announce a conversion rule and budget before decisions are made. Do not introduce an additional reward for obeying, objecting, contributing or reporting a high fairness rating. Learning is evaluated through reconstruction of arguments and accounts, rather than through the choices made within the game.

For the instructor

Allow roughly thirty to forty-five minutes for instructions and play, and sixty to ninety for a class that includes comparisons and discussion. These are planning estimates, not timings from a supervised classroom pilot. Test the actual devices, participant count and connection before teaching.

The single-encounter basic option is useful when an initial response should be separated from accumulated experience. Ten fixed encounters allow discussion of learning about a counterpart, reciprocity and temporal dependence. Ten reassigned encounters reduce pair continuity while retaining experience with the instructions and institution. A difference between these options should not be interpreted as a reputation effect alone: expectations of future interaction with the same person also change. The program does not announce identities or display a public reputation history.

1.4 Instructor and participant access

Institutional navigation begins at <https://beer-lab.org/> and continues to <https://teaching.beer-lab.org/>. The family card is titled Hearing, Reasons, and Procedural Justice. Its proposed domain is <https://procedure.beer-lab.org/>. The following stable routes are prepared for the catalog; public availability depends on deployment by the laboratory. The delivered local instance has been checked at <http://localhost:8108/demo>, which is accessible only on the computer running it.

https://procedure.beer-lab.org/room/procedure_en

This is the English basic room. It offers one encounter, ten fixed encounters and ten reassigned encounters. The Spanish basic room uses the same logic and economic rules, with the participant interface translated:

https://procedure.beer-lab.org/room/procedimiento_es

The two extended rooms contain all twelve conditions in their respective languages:

https://procedure.beer-lab.org/room/procedure_extended

https://procedure.beer-lab.org/room/procedimiento_extendido

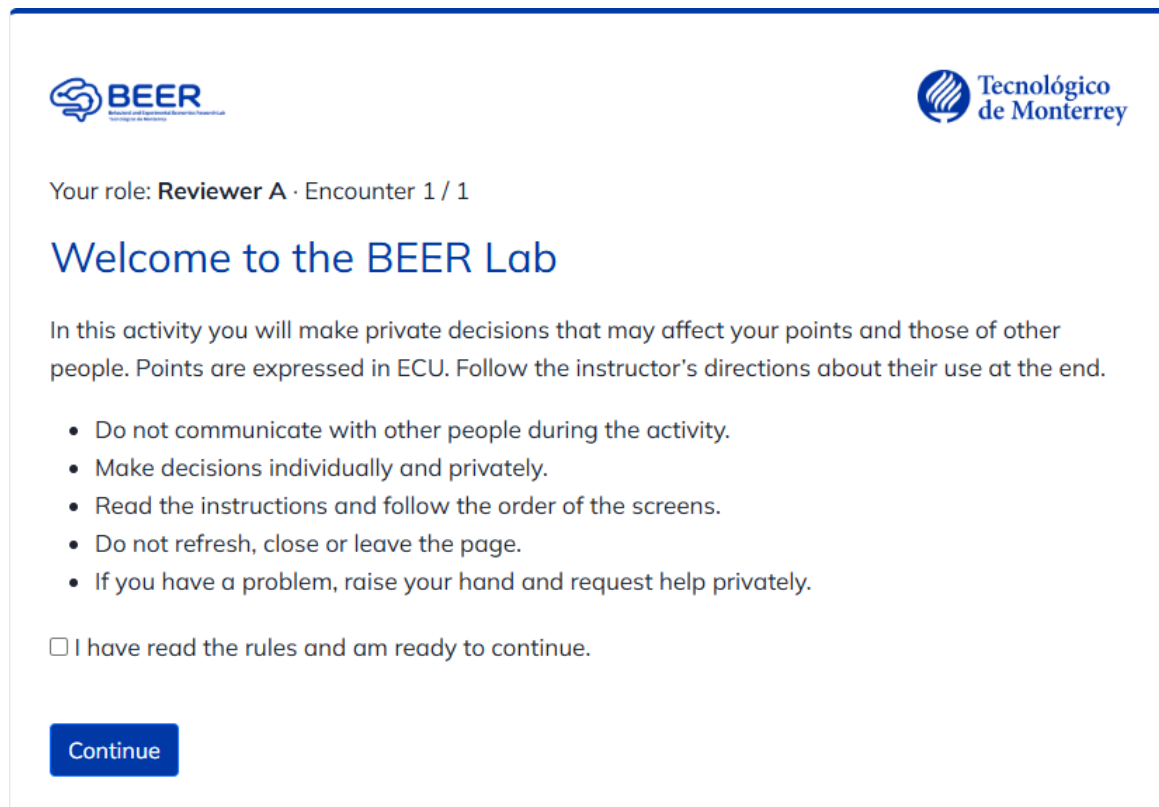
Instructors use Demo to try configurations and Rooms to prepare a classroom session. Administrative access requires the appropriate institutional credential; that credential should not be distributed to students. Participants use the public room or an individual link generated by the newly created session. Two people must not share the same individual link. The report is opened from the administrative session and is not part of public participant navigation.

Before distributing links, check language, edition, condition and participant count. The form indicates whether the chosen condition requires multiples of two or three. If Demo or Rooms displays another game family, stop creating that session and consult the laboratory coordinator. Isolation protects both configuration selection and data separation. A card with the correct title is insufficient if its room opens the wrong activity. Keep the public room, administrative room and individual participant links conceptually separate when giving access instructions.

Sequence and accounts

2.1 What happens during an encounter

The opening screen presents the laboratory and its common rules: individual decisions, no communication during the activity, on-screen instructions and private assistance when problems arise. The next screen states the assigned role, interaction horizon and rules of the selected condition. Instructions include a numerical accounting example. Three comprehension questions check the applicant's endowment, the maximum contribution and the reviewer benefit multiplier. Incorrect answers can be attempted again; they do not generate a monetary penalty or a public assessment of the student.



Your role: **Reviewer A** · Encounter 1 / 1

Welcome to the BEER Lab

In this activity you will make private decisions that may affect your points and those of other people. Points are expressed in ECU. Follow the instructor's directions about their use at the end.

- Do not communicate with other people during the activity.
- Make decisions individually and privately.
- Read the instructions and follow the order of the screens.
- Do not refresh, close or leave the page.
- If you have a problem, raise your hand and request help privately.

☐ I have read the rules and am ready to continue.

[Continue](#)

Figure 2.1: Welcome and common rules.

Each encounter begins with a file. Under automatic resolution, the initial charge is displayed and will become final. Under imperfect records, the applicant also knows the true value of the file. That value is not shown to the reviewer before a review request. Under authority selection, proposals come first: the applicable charge depends on the selected proposal, rather than on the charge

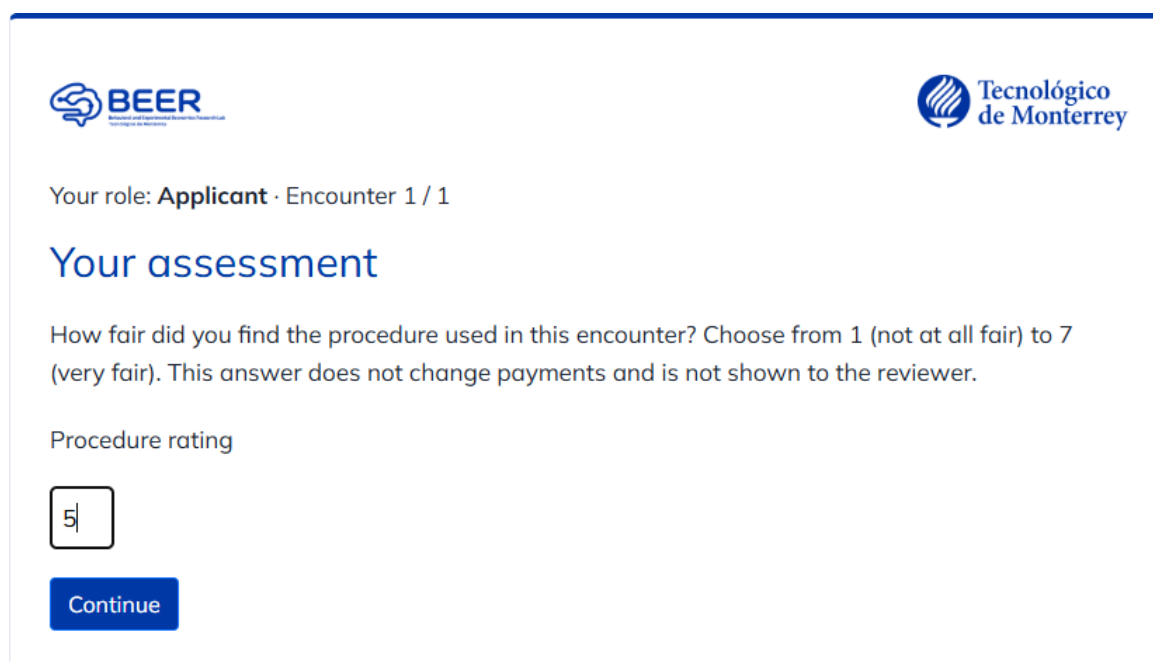
lottery used in the other conditions. This distinction should be reconstructed before students compare behavior across institutional arrangements.

Waiting pages indicate that another person must complete a step. Waiting is not an economic choice. In particular, the program never announces that a message has been read before the reviewer confirms reading it. The confirmation records an action by the reviewer, but cannot verify mental attention, deep comprehension or agreement. Retain that distinction during discussion: the software observes an acknowledgment, not an internal experience of respectful listening. A participant may comply with the acknowledgment requirement while remaining unpersuaded by the message.

What participants will see

Applicants see their charge and the options actually available. If a hearing is nonbinding, the screen says so. If review may increase the charge, that consequence is also stated. Reviewers receive only the information needed for their current step and explicitly acknowledge the required readings.

After the resolution and any applicable communication, the applicant assesses how fair the procedure seemed on a scale from one to seven. This exploratory question is unpaid. The applicant then chooses an integer contribution between zero and ten. Separate screens prevent the two answers from being presented as interchangeable measures. They do not eliminate ordering effects: reflecting on procedural fairness may influence the subsequent contribution. The order is identical across conditions, so an instructor should neither ignore it nor claim that it has been experimentally isolated.



BEER
Laboratory of Economic Experimentation and Research

Tecnológico de Monterrey

Your role: **Applicant** · Encounter 1 / 1

Your assessment

How fair did you find the procedure used in this encounter? Choose from 1 (not at all fair) to 7 (very fair). This answer does not change payments and is not shown to the reviewer.

Procedure rating

5

Continue

Figure 2.2: A private assessment of the procedure.

The outcome screen shows payments by role, the charge and external accounts. The individual fairness rating is not disclosed to the counterpart. At the end of the last active round, a final screen confirms completion and displays accumulated payment. No further navigation is needed. Participants can remain on that screen while the instructor prepares aggregate results and opens the discussion. The final message is part of the activity, rather than a generic platform notice that there are no pages left.

2.2 Reference accounting

Let d denote the final charge and c the applicant's contribution. In the basic condition, d equals ten or thirty with equal probability, while c is an integer between zero and ten. Without review, payments are

$$\pi_A = 100 - d - c, \quad \pi_R = 30 + 2c.$$

The subscript A denotes the applicant and R the assigned reviewer. The charge is deposited in an external administrative account of size d . It is not income for the reviewer. Each contribution unit reduces applicant payment by one and raises reviewer payment by two. It therefore increases combined participant payments by one. This creation of points represents an experimental technology, not an estimate of the social return to a real legal institution.

With charge thirty and contribution ten, the applicant receives sixty and the reviewer fifty. Participant payments sum to one hundred and ten. Adding the thirty in the administrative account gives an expanded total of one hundred and forty: initial endowments summed to one hundred and thirty, and the activity created ten. With charge ten and contribution zero, payments are ninety and thirty, the administrative account receives ten and the expanded total is one hundred and thirty. The difference between these examples cannot be attributed to generosity alone because the charge also changes.

Checkpoint

Before discussing fairness, ask a student to reconstruct the identity: participant payments plus the administrative account plus the review account equal initial endowments plus the increase created by the activity. A transfer to an external account reduces participants' income but remains visible in expanded accounting.

A requested review costs two ECU. If q indicates that review was requested, applicant payment becomes $100 - d - 2q - c$, and the external review account receives $2q$. The assigned reviewer's payment formula remains unchanged. The fee is charged even when the record was correct and the charge does not change. The program records the initial charge, final charge and fee separately, allowing correction, administrative transfer and verification cost to be distinguished. Adding them together too early would obscure the institutional mechanism.

Consider a true file value of ten incorrectly recorded as thirty. Without a request and with contribution four, the applicant receives sixty-six and the reviewer thirty-eight. With review, the charge falls to ten and the fee is two: the applicant receives eighty-four while the reviewer still receives thirty-eight. Holding the contribution fixed, the private gain from requesting review is eighteen. No subsidy is needed to finance that improvement: the administrative account receives twenty less, while the review account receives two.

Authority selection involves two reviewers, each initially endowed with thirty. The contribution benefits only the assigned reviewer; the unselected reviewer keeps thirty. If proposals are ten and thirty, the first is selected and the applicant contributes four, payments are eighty-six, thirty-eight and thirty. The administrative account receives ten. The expanded sum is one hundred and sixty-four, equal to the three initial endowments of one hundred and sixty plus four created through the activity. Comparisons with pair conditions must account for the different group size.

Monetary parameters are declared in the session configuration. When the laboratory changes endowments, charges, the review fee or the multiplier, the application uses those parameters in its rules and accounts. An ordinary class should retain the documented defaults and announce any adaptation before play. A new calibration requires checking restrictions, examples, the payment budget and theoretical predictions. The configuration rejects bounds that could produce a negative applicant balance with the maximum contribution and review fee.



Your role: **Applicant** · Encounter 1 / 1

Encounter outcome

Your payment for this encounter: **86 ECU**

Applicant: **86 ECU**
Reviewer A: **38 ECU**

Final charge	10 ECU
Contribution	4 ECU
Review fee	0 ECU
External administrative account	10 ECU
External review account	0 ECU
Joint increase from the activity	4 ECU
Total for participants and external accounts	134 ECU

[Continue](#)

Figure 2.3: Complete accounts for an encounter.

Theory and institutions

3.1 A monetary starting point

The simplest monetary prediction assumes that each person maximizes only their own payment, understands the rules and expects no consequences outside the game. The applicant loses one ECU for each contribution unit, so the optimal final contribution is zero. This conclusion does not depend on the charge or on whether a message or explanation occurred. Because the reviewer does not receive the charge, a purely monetary reviewer is indifferent between charges when the anticipated contribution is zero. Under these assumptions there is no unique prediction for the reviewer's choice in the discretion condition.

For a single encounter, this reference follows by considering the last step and reasoning backward. For ten encounters with a known horizon, similar reasoning supports zero contributions if exclusively monetary preferences and common knowledge are retained. Students may instead consider reciprocity, intention, inequality, duty or reputation. Presenting the monetary result as a benchmark allows testable questions; presenting it as the correct conduct turns the activity into a moral assessment that it was not designed to provide. The distinction should be explicit in both instructions to teaching assistants and feedback.

Theoretical foundation

An explanation can change interpretations without changing feasible monetary outcomes. Review can change the charge itself. Consequently, a difference between review and no review combines material consequences and experience of procedure; it is not automatically an estimate of the value of being heard.

Review has a more specific monetary prediction. The applicant knows both the initial charge and the true file value. If the initial charge is thirty and the true value ten, paying two saves twenty, making review privately worthwhile. If the two values coincide, review simply costs two. If the initial charge is ten and the true value thirty, review increases the charge and adds the fee. With default parameters, only the first case justifies a request under strict monetary self-interest. A different request may reflect a mistake, a preference for accurate records, experimentation or other concerns omitted from the benchmark.

Reviewer choice requires attention to two stages. Reviewers make proposals before learning which one will be applied. An applicant who cares only about money and plans to contribute zero chooses the lower proposal, remaining indifferent when proposals match. Anticipating selection could change proposals. However, selection itself pays no premium and the later contribution can be zero, so it does not follow that all reviewers must propose the minimum. Distinguish a best response for the applicant from a unique equilibrium prediction about offers. Avoid introducing a competition result that the implemented incentives do not establish.

3.2 Behavioral interpretations

An applicant may contribute more after being heard because the interaction seems respectful, because they want to reciprocate toward the reviewer or because they like the final outcome. These explanations can generate overlapping patterns. Ratings and contributions are therefore recorded separately, and conditions distinguish voice without authority from voice with discretion. If ratings increase while contributions do not, the result reveals a difference between reported assessment and costly behavior. It does not establish that one measure is false or that respondents were dishonest.

Reciprocity here refers to a response to an action or intention attributed to another person. An automatic explanation may reduce personal attribution of the charge to the reviewer. Discretion may increase it. The same charge of thirty could therefore produce different responses depending on who appears to have chosen it. The game does not directly elicit beliefs about intentions. When interpreting contribution differences, say that a pattern is compatible with reciprocity, and identify an additional question or comparison that could distinguish it from competing accounts.

Inequality aversion offers another interpretation. Before contributing, the applicant generally retains more than the reviewer. A contribution narrows the gap because it subtracts one from the applicant and adds two to the reviewer. With charge ten, equal payments would require a contribution of twenty, outside the permitted interval. With charge thirty, equality would require thirteen and one-third, also unavailable. Within the feasible range, contributing ten brings payments closer without equalizing them. A maximum contribution therefore does not identify an exact equality ideal, while an intermediate contribution may combine several concerns.

Attention and demand effects also matter. Restating the lottery rule on the resolution screen may make it easier to remember even though everyone was told it initially. Inviting an objection may suggest that objections are relevant to the activity. A neutral participant-facing title reduces a direct signal about the hypothesis but cannot remove all contextual influence. Keep spoken instructions brief and avoid announcing that a hearing should increase cooperation. If the class already knows the topic from a lecture, record that context when discussing the scope of the exercise.

Attention

Do not turn an exploratory rating into a diagnosis of institutional legitimacy. A high rating may express satisfaction with an outcome; a low rating may reflect disagreement with the procedure, charge or experimental setting. Cooperation with one reviewer should not be interpreted as general obedience to law.

3.3 What the literature contributes

[Lind et al. \(1990\)](#) studied voice before and after a decision, along with relevant information, in a goal-setting procedure. Their findings support distinguishing instrumental from noninstrumental participation: both forms of voice could influence fairness judgments, with a larger effect for predecision voice in that setting. This game retains the conceptual question but uses charges, peer interaction and a subsequent contribution. The earlier study's effect sizes are not numerical predictions for this class, and the present fairness question is not presented as their validated measurement instrument.

[Leventhal \(1976\)](#) developed an approach to evaluating procedures that motivates discussion of consistency, information and opportunities for revision. It provides a conceptual basis for comparing identical files and correcting records. It is not a trial of this monetary mechanism, nor evidence that allowing applicants to choose reviewers necessarily increases cooperation. Discretion, imperfect

records and selection between proposals are transparent classroom constructions rather than replications of a published protocol. Students should learn to distinguish a theoretically motivated adaptation from an empirical replication.

A legal discussion can recognize that procedural protections have value independently of their effects on contributions. The game asks which consequences change and which reasons might justify an institution. It does not establish that a hearing is unnecessary when average cooperation fails to rise. Conversely, a procedure that raises contributions is not justified solely by that result. Normative evaluation requires making relevant values and affected populations explicit, and those elements are not fully contained in a table of ECU payments.

3.4 Hearing and explanation

Automatic resolution is the common control. The program draws ten or thirty with probability one-half each, and the reviewer cannot change the charge. A postdecision hearing adds a structured message after the resolution is known. The applicant may request a lower charge, record an objection to the rule or state that there is no objection. The reviewer must acknowledge reading it. None of these options directly changes payment. The condition examines an explicitly nonbinding opportunity for expression, not a hidden opportunity to persuade an official.

The explanation condition restates each charge's probability and the realized value at the moment of resolution. Everyone already knew the distribution from the instructions. The treatment therefore changes timely presentation and salience, rather than adding a substantive legal justification or initially secret information. An explanation of a lottery describes how a number was produced; it does not establish that the lottery is fair. That distinction is especially useful when discussing whether formal reasons are informative, persuasive or sufficient to justify administrative action.

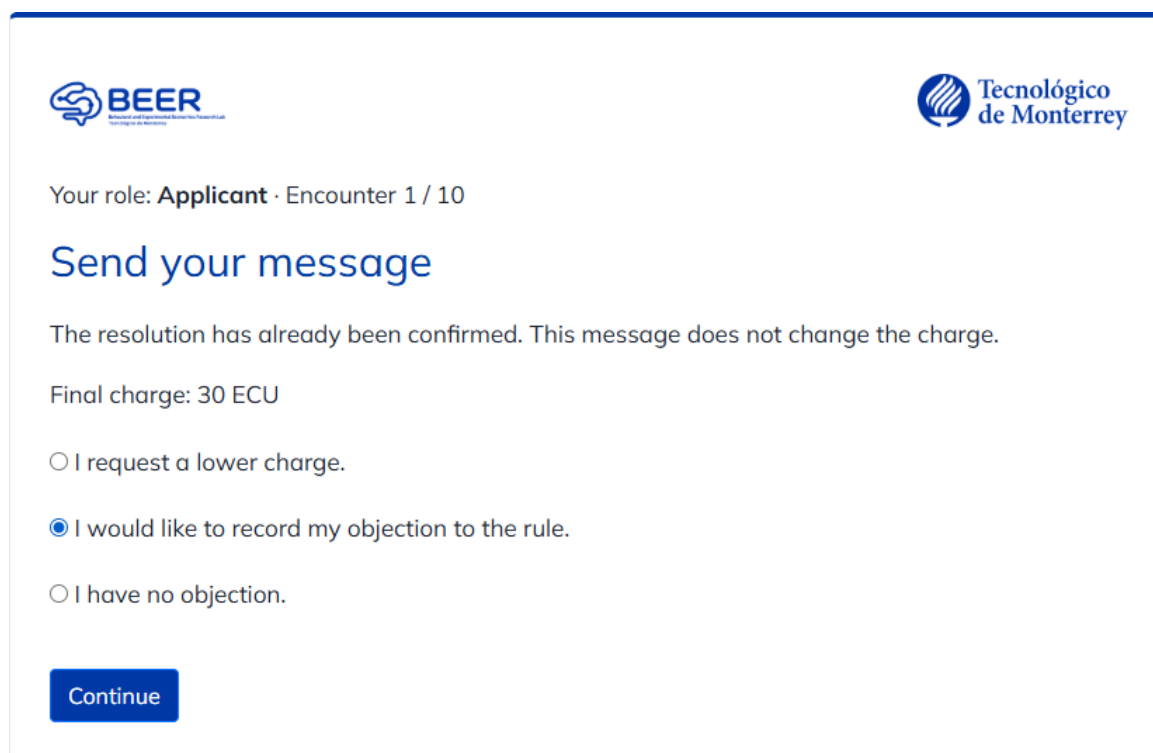
Combining postdecision hearing and explanation completes four cells: neither component, hearing only, explanation only and both. This permits questions about whether the components reinforce each other, substitute for each other or affect different responses. Sessions share the same marginal charge distribution but have independent draws. The program does not promise that every group in one session receives the exact sequence received by a control group. With small classes, display realized charge distributions before interpreting differences in overall means.

Read the rating distribution first and then the contribution distribution. Compare concentrations at extremes as well as averages. Similar means may conceal polarization: one class could split between ratings one and seven while another concentrates at four. Ask whether the opportunity to speak appears to affect everyone similarly or might depend on the received charge. A conditional table helps describe such heterogeneity without converting a classroom description into conclusive causal evidence. The distinction between description and identification should remain visible throughout the discussion.

3.5 Predecision voice and effective authority

Predecision voice without modification occurs after a provisional charge is known but before the resolution is confirmed. The reviewer must read the message but cannot change the value. Comparing this condition with postdecision voice retains the absence of authority while shifting the timing of expression. It must not be announced as a genuine chance to persuade the reviewer. The screen explicitly says the provisional charge will remain. This transparency avoids eliciting reactions through an untrue promise about participants' influence.

Predecision voice with discretion retains the message and acknowledgment, but allows the reviewer



BEER
Behavioral and Experimental Economics Research Laboratory
Tecnológico de Monterrey

Tecnológico de Monterrey

Your role: **Applicant** · Encounter 1 / 10

Send your message

The resolution has already been confirmed. This message does not change the charge.

Final charge: 30 ECU

☐ I request a lower charge.

☒ I would like to record my objection to the rule.

☐ I have no objection.

Continue

Figure 3.1: A message after a confirmed resolution.

to choose ten, twenty or thirty. A structured reason is also recorded: the reviewer considers the lower, intermediate or higher charge appropriate. These reasons are participants' statements, not proof of their internal reasoning. The intermediate charge expands the outcome set relative to automatic resolution. Preserve proposed charges and reasons as separate variables, and do not infer benevolent intention solely from observing a low charge.

The main control for discretion is predecision voice without modification. Their difference captures both decision authority and the charges that authority produces. If contributions rise with discretion and charges fall, both dimensions may contribute. Restricting analysis to charge thirty does not automatically solve the problem: those cases may have been selected by different reviewers or applicants. The report explicitly flags this limitation, and exports retain initial and final charges so the full sequence can be reconstructed rather than compressed into a single outcome.

During feedback, separate three statements: the applicant could speak, the reviewer acknowledged the message and the reviewer had authority to change the resolution. The first describes an opportunity, the second a recorded action and the third a decision power. A procedure can satisfy the first two without the third. This distinction prepares discussion of hearings, consultation and adjudication without claiming that the game completely represents any real procedural guarantee. Ask students to identify which statement they would need to establish for their own legal argument.

3.6 Imperfect records and review

These two conditions contain a true file value of ten or thirty, equally likely. An administrative record reverses the value with probability one-quarter, and the initial charge follows that record. Applicants know the truth and can detect discrepancies. Reviewers do not see the true value before a request. The control offers no correction. In the review condition, the applicant can pay two to have the file consulted and its true value applied. The applicant knows the monetary consequence of requesting review rather than facing an uncertain review success rate.



Your role: **Reviewer A** · Encounter 1 / 10

Resolve the file

You have received the message. Choose the final charge and record a reason.

I request a lower charge.

Initial charge: **30 ECU**

Proposed charge

20 ECU

▼

Selected reason

☐ I consider the lower charge appropriate.

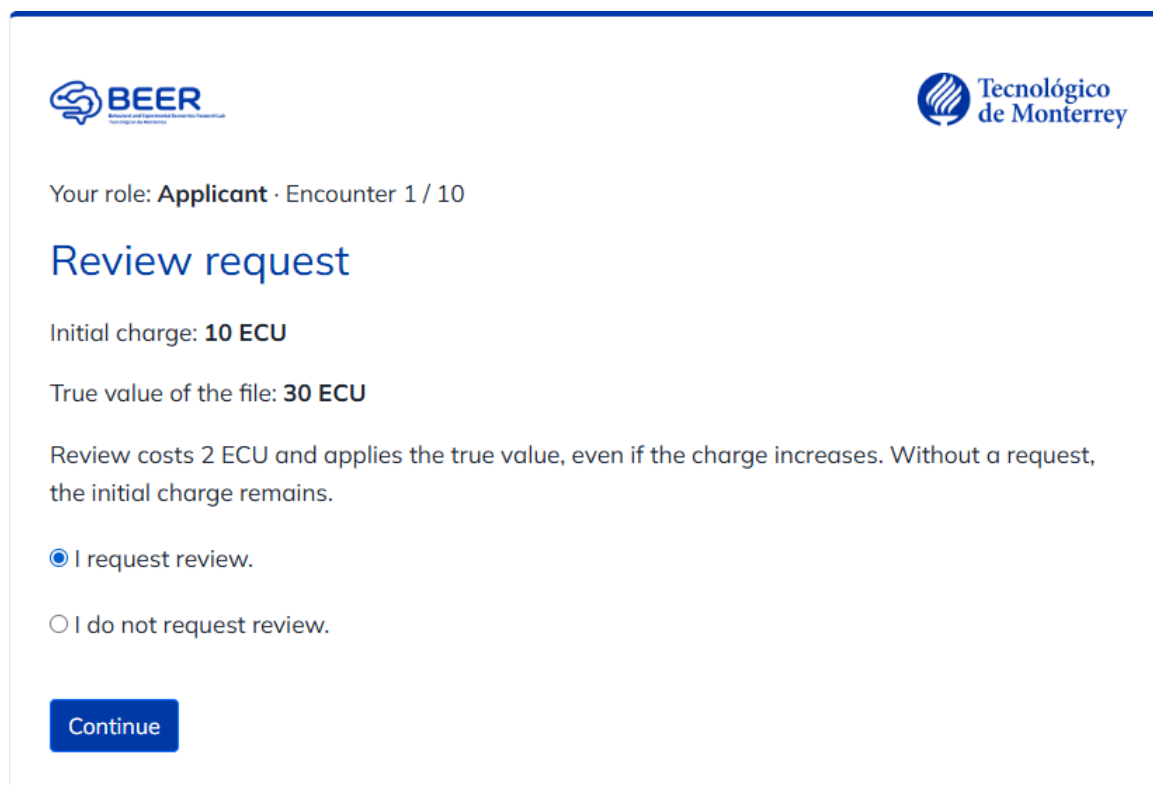
☒ I consider the intermediate charge appropriate.

☐ I consider the higher charge appropriate.

Continue

Figure 3.2: The reviewer chooses the final charge.

Correction occurs mechanically after the reviewer's acknowledgment. The reviewer cannot retain an erroneous charge or negotiate a different value. The technology corrects both overcharges and undercharges. Because requesting review is voluntary and costly, aggregate correction may be asymmetric: applicants facing overcharges have a private incentive to request it, while people benefiting from an error do not. This illustrates why formal access to a remedy does not ensure that every error reaches review. Availability, uptake and correction are separate stages of the institutional process.



Your role: **Applicant** · Encounter 1 / 10

Review request

Initial charge: **10 ECU**

True value of the file: **30 ECU**

Review costs 2 ECU and applies the true value, even if the charge increases. Without a request, the initial charge remains.

☒ I request review.

☐ I do not request review.

Continue

Figure 3.3: A review request with an explicit fee.

The report distinguishes initially erroneous records, requests and corrections among requests. None of these denominators substitutes for the others. A high correction rate among requests may coexist with uncorrected errors when other applicants do not request review. Compare fees and final charges as well. A small class may generate no instances of a particular error type by chance. Do not fabricate additional files inside the running session to complete a table; use the explicitly hypothetical numerical exercises in this guide instead.

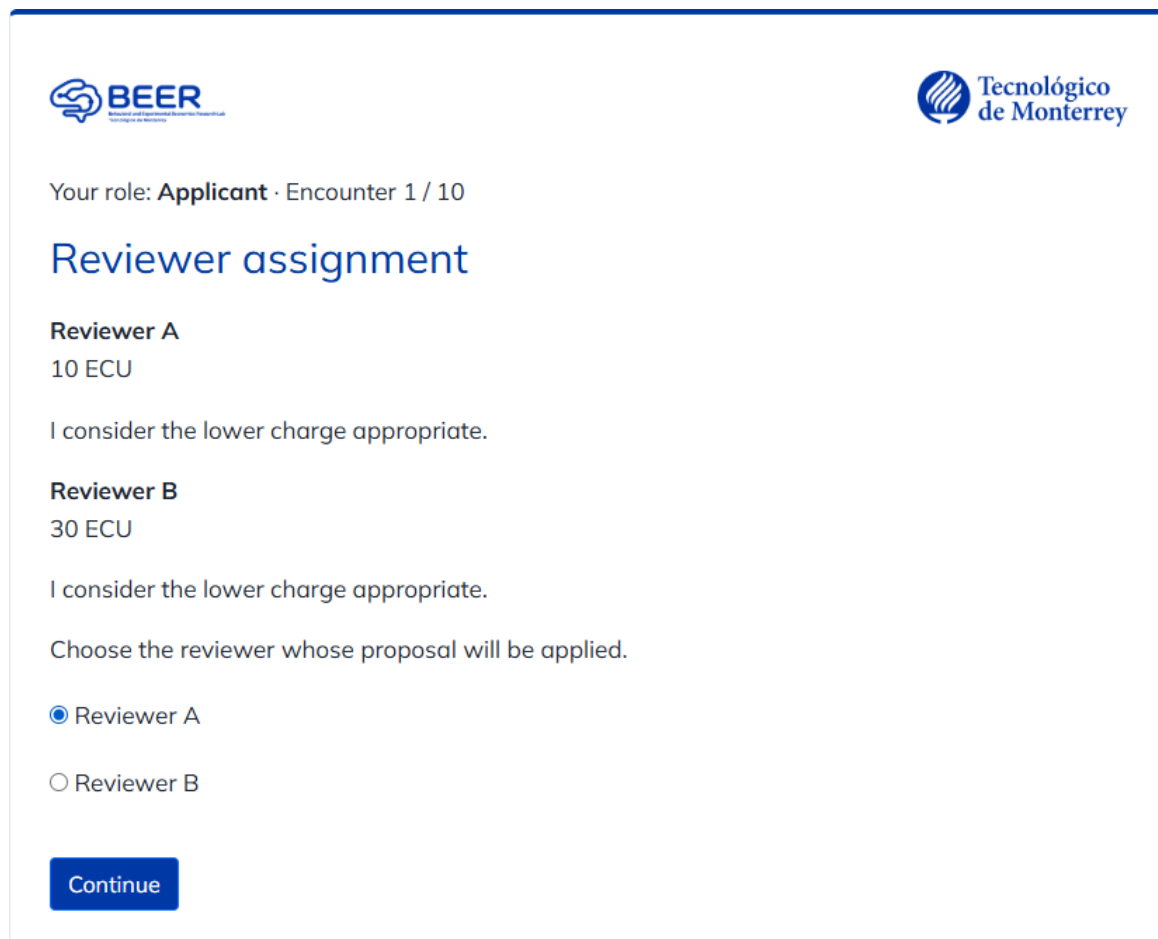
3.7 Consistency and authority selection

A stable rule applies to identical files across ten encounters. It draws a charge for each applicant initially and keeps that charge throughout. A variable rule draws again in every encounter. Both have marginal probabilities one-half for ten and thirty, but locate variation differently: across applicants in the stable case, and across applicants and time in the variable case. The purpose is to distinguish individual predictability, equality between people and temporal variability. Stability does not mean that everyone receives the same charge.

Interpret this comparison through round evolution and the dispersion of accumulated payments. Someone assigned a high stable charge receives it ten times; someone under the variable rule may experience both levels. The comparison is therefore not merely a verbal label about consistency. It changes temporal risk and learning opportunities. These conditions contain no true charge against

which to classify an error. Calling the higher charge incorrect would introduce a criterion absent from the stated rules. Students should specify whether they object to randomness, persistence or unequal treatment across people.

Authority selection uses groups of three. Two reviewers simultaneously propose a charge and reason, and the applicant observes both proposals. One condition selects a reviewer through an equal-probability lottery; the other allows the applicant to choose. The selected proposal is binding. The unselected reviewer retains thirty and receives no benefit from the contribution. This keeps group size comparable and avoids contrasting a choice between two candidates with a condition containing only one possible reviewer.



Your role: **Applicant** · Encounter 1 / 10

Reviewer assignment

Reviewer A
10 ECU

I consider the lower charge appropriate.

Reviewer B
30 ECU

I consider the lower charge appropriate.

Choose the reviewer whose proposal will be applied.

☒ Reviewer A

☐ Reviewer B

Continue

Figure 3.4: Choosing between binding proposals.

This extension concerns selection of an individual authority with power over a file, rather than collective voting on rules. Its effect may combine applicant control, authority composition and competition between proposals. Ask what changed first: available proposals, the selected proposal or the later response to the reviewer. Exports preserve all three stages. A class seeking the pure effect of choice while holding outcomes identical would need another design; renaming the current comparison cannot supply that missing control.

Report and discussion

4.1 Disclosure and the observational unit

The instructor report opens with aggregates hidden. It shows completed and expected encounters together with the number pending. The instructor chooses when to reveal statistics and can hide them again. This action changes presentation in the instructor's browser; it does not distribute the report to participants or modify their choices. Avoid projecting the administrative page containing individual links. Open the report and position it appropriately before sharing the screen with the class. Administrative access and classroom disclosure are separate decisions.

A completed encounter is a group that has finished the sequence and has fully calculated accounts. One pair in a ten-encounter session can contribute ten report rows. One three-person group also contributes ten, not thirty. Payments by role are summarized from those encounter rows. With two pairs and one encounter, the expected count is two. With two pairs and ten encounters, it is twenty. The application explicitly reads active rounds even when the administrator opens the report from the last technical round of the application.

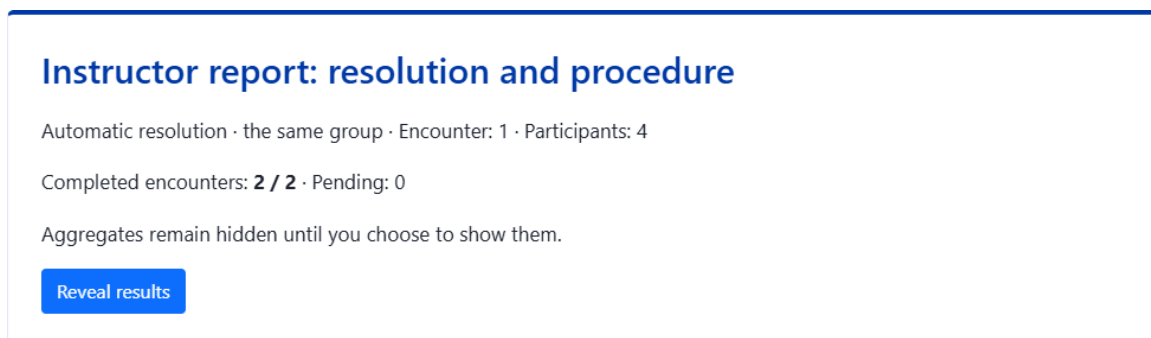


Figure 4.1: The report before aggregate disclosure.

Excluding incomplete encounters prevents partial decisions from being mixed with final accounts, but may introduce selection. If the slowest groups abandon a session, the mean for groups that finished does not represent everyone who started. Always begin by stating how many encounters were completed and what happened to the remaining ones. A suitable opening is: eighteen of twenty planned encounters are complete; these statistics describe those eighteen and do not yet include the two groups still completing their last step.

Displayed figures are descriptive statistics for one session. They do not automatically compare every treatment run in the laboratory or calculate statistical significance. The final report section explains how to prepare a comparison from exports. A class may place tables from two sessions beside each other, but should retain the assignment unit. When an entire session receives one condition, many rows within that session do not create many independent institutional assignments.

Sample size in the report and the number of independent assignments answer different questions.

4.2 Reading each display

The contribution histogram displays all eleven possible values, from zero to ten. Frequency counts complete encounters with that contribution, and the percentage divides the frequency by all complete encounters. Bars share a zero-to-one-hundred-percent scale. An empty bar need not indicate a rendering problem: nobody may have chosen that value. With no complete encounters, percentages remain zero while averages without observations appear as a dash. A missing mean should not be interpreted as a measured contribution of zero.

The rating histogram contains seven categories. Present its distribution and median before treating all distances along the scale as comparable. Moving from one to two need not express the same subjective change as moving from six to seven. The mean is a convenient summary of numerical coding, not a validated cardinal measure of justice. When discussing a change in the average, explain how the distribution changed and how many people occupied each role. A single summary statistic should not displace the underlying responses.

Contribution	Frequency	Percentage of completed encounters
0	0	0%
1	0	0%
2	0	0%
3	0	0%
4	2	100%
5	0	0%
6	0	0%
7	0	0%
8	0	0%
9	0	0%
10	0	0%

Figure 4.2: Contribution frequencies.

The table by final charge groups encounters at ten, twenty and thirty ECU. Conditions that cannot produce twenty will show no observations in that row. Ratings and contributions are compared within realized charge levels. This table helps detect composition differences and explore associations. It does not control for reviewer selection, reviewer preferences, learning or unobserved characteristics. In particular, final charge may itself be a consequence of the institution under comparison. Conditioning on it can therefore alter the question being answered.

The round-evolution table presents completed groups, average charge, average rating and average contribution in each period. If the group count declines toward the end, do not describe a behavioral trend as learning before checking progress. Even with a constant count, experience, fatigue, anticipation of the end and responses to counterparts remain possible explanations. A downward contribution trend is compatible with several mechanisms. The table records what

happened; classroom reasoning should propose how to distinguish why it happened rather than treating the visual slope as its own explanation.

Under authority selection, payment summaries for Reviewer A and Reviewer B include both selected and unselected encounters for each position. A difference between those rows does not directly measure authority quality. Examine the selection indicator and proposals before interpreting it. Color identifies a role, not the merit or fairness of its decisions. Applicants retain the same color across decision and outcome displays, helping students trace the accounts without attaching a normative interpretation to the visual design.

Feedback script

Begin with what is observable: how many encounters are available, which charges occurred and where contributions are concentrated. Then propose an interpretation. Finally identify an observation that could challenge it. If a message seems to increase cooperation, state which comparison holds material consequences constant and which limitation remains in this class.

4.3 A hypothetical reading exercise

Suppose two single-encounter sessions each contain twelve pairs. Under automatic resolution, six receive charge ten and six charge thirty; the average contribution is three. Under a postdecision hearing, eight receive ten and four receive thirty; the average contribution is four. The raw difference is one ECU. It should not immediately be attributed to the hearing, because the charge composition differs. Prepare a table with encounter counts and mean contributions within charge, and explain why independent lotteries can produce different realized compositions.

Now suppose contributions average five under charge ten and one under charge thirty in both sessions. The first session would average three, while the second would average eleven-thirds. An aggregate difference appears despite no within-charge difference. This exercise demonstrates an arithmetic property of weighted means. It does not establish that conditioning on charge is always the correct causal strategy: the hypothetical charge is randomized, whereas charges under discretion or authority selection may respond to human decisions affected by the condition.

A session containing only low charges cannot provide an internal comparison between charge levels. Say so and use the numerical exercise to complete the intuition. Changing parameters after seeing outcomes to obtain a preferred contrast would contaminate the activity. A future class could deliberately balance assignments, provided that the altered design is documented. The delivered implementation uses the announced distributions and retains realized draws; refreshing a page does not supply a fresh opportunity to obtain a favorable charge.

Teaching, assessment and data

5.1 A sixty-minute class

Use the first eight minutes for a written question: if two procedures produce the same charge, is there a reason to prefer one? Request a brief answer before presenting the treatment comparison. Allocate seven minutes to rules, access and comprehension, twenty to play, ten to distributions and fifteen to discussion. Adapt this schedule to actual class size. Shared devices require additional preparation, and students reading the same screen should not be described as making fully private decisions. Technical arrangements are part of the learning environment.

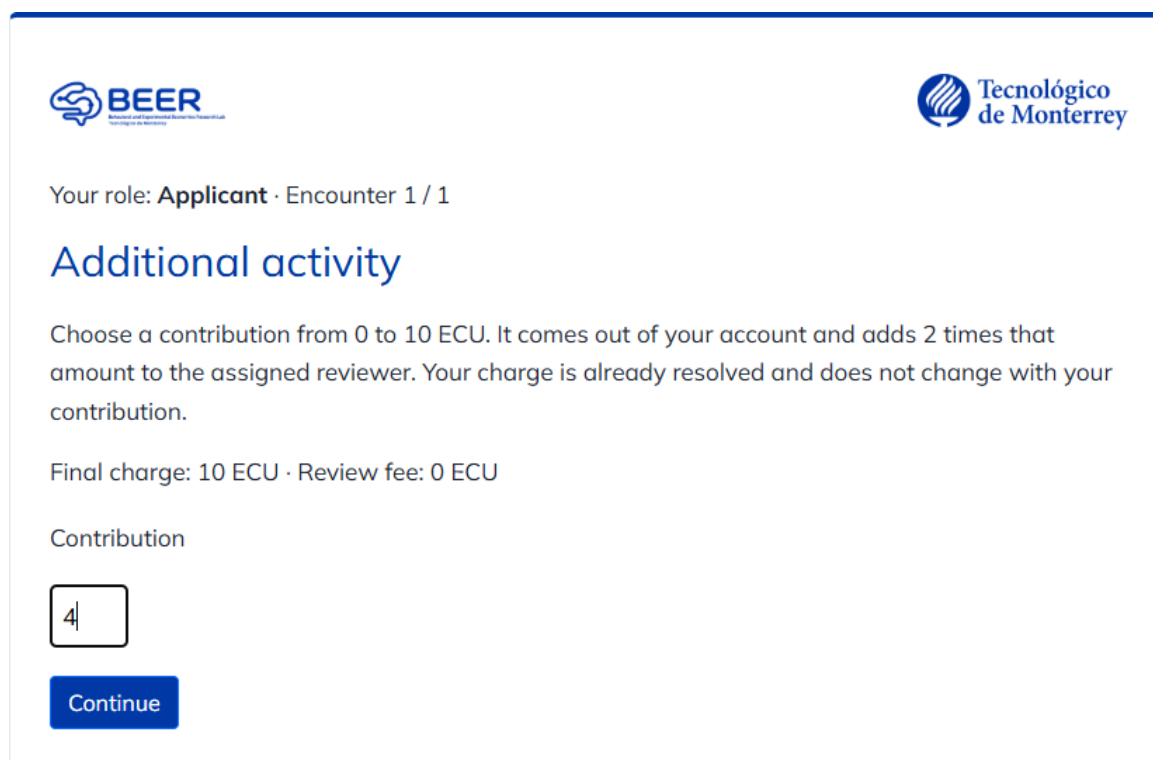
Use neutral opening language: everyone has a role and should follow the options on the screen; some decisions affect points and others are unpaid responses. Do not announce that the course expects more cooperation under participatory procedures. Avoid suggesting that contributing zero is selfish or requesting review is confrontational. The goal is to help students reason about institutions, not to reward anticipation of the instructor's preferred result. Neutral facilitation is particularly important when the instructor will later grade written reflections about the activity.

During play, record operational incidents without intervening in choices. If someone asks which option they should choose, refer them to the rules and their own decision. If they ask how a payment is calculated, explain privately using an example different from their pending choice. If a pair is blocked by an absent participant, identify the stage in the session monitor. Do not insert fictitious decisions or acknowledge messages on participants' behalf merely to accelerate the class without explicitly stopping and redefining the activity.

After encounters finish, ask what information each role needed and what each role could actually change. This reconstruction should precede interpretation of averages. Reveal the report and request three statements: one descriptive finding, one compatible explanation and one conclusion the data do not permit. For example: there were more positive contributions; this is compatible with reciprocity; it does not establish increased population trust in every public institution. This structure separates observation, mechanism and scope while giving students a practical template for careful inference.

5.2 An advanced ninety-minute class

Use fifteen additional minutes to design controls before play and another fifteen to examine exports afterwards. Assign small teams a comparison: predecision versus postdecision voice, discretion versus no authority, or choice versus lottery selection of a reviewer. Each team should write one sentence identifying what changes, what stays constant and what outcome will be measured. Ask them to identify a variable occurring after treatment that should not automatically be added as a statistical control. The exercise develops design judgment before students encounter realized data.



BEER
Behavioral and Experimental Economics Research Lab
Technológico de Monterrey

Tecnológico de Monterrey

Your role: **Applicant** · Encounter 1 / 1

Additional activity

Choose a contribution from 0 to 10 ECU. It comes out of your account and adds 2 times that amount to the assigned reviewer. Your charge is already resolved and does not change with your contribution.

Final charge: 10 ECU · Review fee: 0 ECU

Contribution

Continue

Figure 5.1: The subsequent contribution decision.

After play, teams can construct a common table containing configuration, language, horizon, group count, mean charge, mean contribution and rating distribution. For imperfect-record conditions, add requests and corrections with their denominators. The goal is not to produce a regression with many controls as quickly as possible, but to reconstruct the comparison that actually occurred. If the same participants completed one condition after another, order and experience are part of that design. A discussion that ignores sequencing would overstate what the classroom exercise identifies.

A debate extension assigns different normative defenses to different teams. One argues from autonomy and expression, another from decision accuracy, and another from costs and speed. No team may settle every objection using the mean contribution alone. Ask each team to identify one strength in a rival position. Experimental consequences can then inform legal discussion without replacing arguments about rights, equality and limits on authority. Students should be able to disagree normatively while agreeing on the numerical accounts and the limits of the comparison.

5.3 Solved exercises

5.3.1 Reconstructing a review

A true file requires thirty, the record indicates ten and the applicant contributes six after requesting review. Find payments and compare with no request while holding the contribution fixed. With review, the applicant obtains $100 - 30 - 2 - 6 = 62$ and the reviewer obtains $30 + 12 = 42$. The administrative account receives thirty and the review account two. Without review, payments are eighty-four and forty-two, with ten going to administration. Requesting review reduces private income by twenty-two while correcting the record. This distinguishes accuracy from private advantage without treating either as a complete welfare criterion.

5.3.2 Comparing levels and distributions

Four applicants rate a procedure one, one, seven and seven. Another four rate it four, four, four and four. Both groups have mean four. The first is polarized, while the second agrees around the midpoint. The solution is not to choose the better mean, but to display both distributions and explain which difference matters for the institutional question. An exploratory scale does not establish that the two groups possess exactly equal amounts of justice. Nor does polarization by itself identify which feature of the procedure divided respondents.

5.3.3 Finding the denominator

Twenty encounters with imperfect records contain five initial errors, four review requests and three corrections. The initial error frequency is five out of twenty. The request frequency is four out of twenty. Corrections among requests equal three out of four. To find the proportion of errors corrected, link corrections to the five initial errors; under this game's mechanical correction rule, three out of five is the relevant fraction. The report explicitly presents the first three quantities, while the fourth can be reconstructed from exports. Three out of four is not the system's overall accuracy rate.

5.3.4 Recognizing selection after treatment

Compare an automatic condition with one where the applicant chooses the reviewer, restricting both to final charges of thirty. Does this identify the effect of choice while holding outcome constant? Not necessarily. Automatic thirty comes from a lottery. Under choice, it may arise because both proposals were high or because the applicant preferred a high proposal with a particular stated reason. The composition of the subset may therefore differ. The solution requires discussing assignment and selection rather than attaching the word control to any observed variable.

5.3.5 Stability and risk

Two applicants under a stable rule receive charges ten and thirty throughout ten encounters. Their combined average charge per encounter is twenty, but accumulated charges are one hundred and three hundred. Two applicants under a variable rule could each receive five charges of each type and accumulate two hundred. That second realization is not guaranteed, but illustrates how identical marginal distributions can coexist with different cumulative dispersion. A discussion of consistency must specify whether it concerns individual repetition, equality across people or certainty about the next decision.

5.4 A learning rubric

Allocate twenty points to identifying rules and authority, twenty-five to payment reconstruction, twenty to interpreting graphs and denominators, twenty-five to institutional argument and ten to recognizing limitations. An excellent answer may defend a hearing even when contributions did not increase, provided it states the value being invoked and distinguishes that defense from an empirical claim. It may also criticize a participatory procedure by documenting relevant costs or errors. The grade depends on precision and support, not on the direction of the conclusion or on the student's choices during play.

5.5 Export and reproducible analysis

The custom export retains one row per person and active encounter. It includes session, encounter, group, a pseudonymous within-session identifier, position, role, condition and matching. It stores initial and final charges, true value when applicable, selected reviewer, message, acknowledgments, proposal, reason, request, rating, contribution and payment. A structured account and the parameters used are also retained. This organization makes it possible to reconstruct payments without relying solely on a screenshot of the instructor report, and to distinguish entered choices from calculated results.

To create an encounter-level table, retain the applicant row for each group and period after filtering completed groups. Do not sum contributions across every participant row: only the applicant chooses that contribution, and other roles' initialized values are not equivalent decisions. To study proposals, retain reviewer rows separately. Under selection, do not automatically discard the unselected proposal, because it is necessary to understand the alternatives facing the applicant. An analysis file should preserve enough information to reconstruct how the selected charge became available.

The package includes a synthetic dataset and a Stata exercise. These examples are generated for practicing data reading and reconstruction; they are neither student results nor evidence for a hypothesis. The exercise verifies payments, summarizes conditions and separates requests from corrections. When working with a real export, inspect variable names and types first and adapt the column selection. Keep demonstration data separate from classroom data so that screenshots and software tests are never inadvertently presented as observations from actual students.

Repeated rounds share participants. Fixed matching retains the same group; reassignment connects counterparts across groups. Because conditions are assigned by session, encounter-level observations are not independent institutional assignments. Begin with session summaries. A research study would additionally require plans for assignment, power, dependence and incomplete observations.

5.6 Privacy and retention

Exported identifiers are pseudonyms absent from the aggregate report. Keep any attendance linkage separately with restricted access. Do not project individual links: they provide access to session positions. Tables without names can still identify people when combined with external lists or observation of screens. Aggregate feedback should remain separate from individual performance monitoring.

Retain the configuration, class date, operational incidents and payment arrangement with the export. Outcomes are interpretable only when available options and their order are known. Screenshots in this guide illustrate verification sessions, rather than behavior from a student sample. Do not draw empirical conclusions from the values displayed in those images. Their function is to teach navigation and interpretation of the screens an instructor will encounter, including incomplete reports, complete accounts and the final confirmation page.

5.7 Common problems and recovery

If someone remains waiting, identify which counterpart must complete a decision. Check that two browsers are not using the same participant link and that every person has advanced from the resolution explanation. Message acknowledgment and file consultation require specific human actions. Staff may explain where a button is, but should not silently substitute for that action.

If someone leaves, the group may remain incomplete and must be reported as such. Recording the incident is more informative than manufacturing a complete encounter to improve the report count.

An obsolete link or a participant-not-found message usually indicates a link from another database or session. Create a new session and distribute current links; do not invent participant codes to reconstruct access. Restarting a server process is different from deleting its database. Updating text or styles requires refreshing the relevant instance while retaining data. Any database recreation is a separate operation with consequences for earlier links and sessions. Instructors should ask the laboratory to preserve active sessions before applying changes during a class.

If the report shows zero observations, check that at least one group has finished the contribution stage and reached results. A recorded review request alone is not a complete account. If a column contains dashes, examine its denominator: the action may not exist in that condition. Review requests, for example, are inapplicable under automatic resolution. Do not replace ineligibility with zero behavior merely to compare averages. A nonexistent option and an available option that nobody used describe different institutional situations.

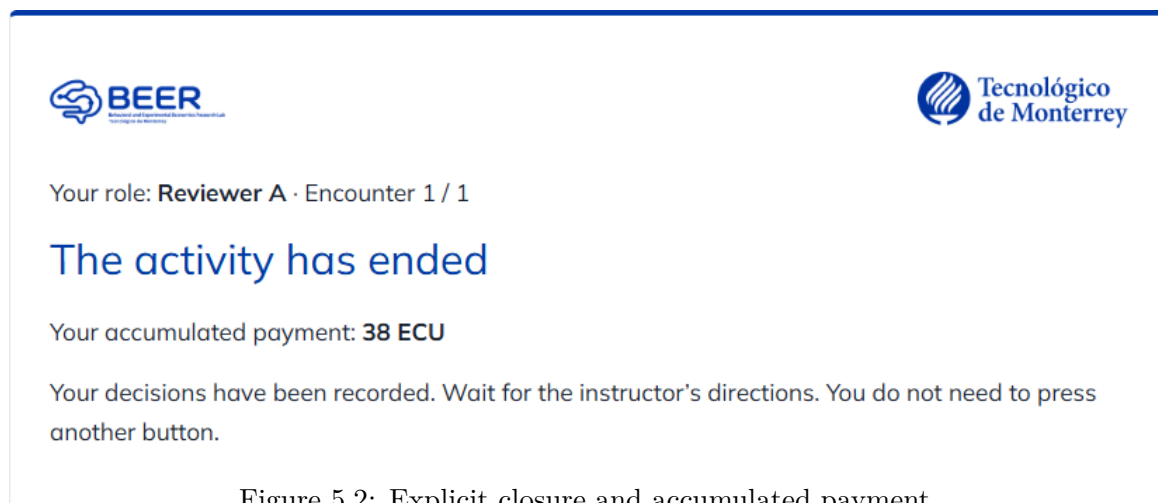


Figure 5.2: Explicit closure and accumulated payment.

Before the next class, check the four rooms, configuration, group size and a complete participant sequence. Afterwards, export data, record incidents and revisit the opening question. Learning should appear in more precise distinctions and better controls, rather than repetition of the displayed mean.

Bibliography

- Lind, E. A., Kanfer, R., and Earley, P. C. (1990). Voice, control, and procedural justice: Instrumental and noninstrumental concerns in fairness judgments. *Journal of Personality and Social Psychology*, 59(5), 952–959. <https://doi.org/10.1037/0022-3514.59.5.952>.
- Leventhal, G. S. (1976). *What Should Be Done with Equity Theory? New Approaches to the Study of Fairness in Social Relationships*. Conference paper, September; ERIC record ED142463. <https://files.eric.ed.gov/fulltext/ED142463.pdf>.
- American Economic Association (accessed 2026). *JEL Classification System / EconLit Subject Descriptors*. C92: Laboratory, Group Behavior; D63: Equity, Justice, Inequality, and Other Normative Criteria and Measurement; K23: Regulated Industries and Administrative Law; K40: Legal Procedure, the Legal System, and Illegal Behavior: General. <https://www.aeaweb.org/econlit/jelCodes.php?view=econlit>.