Enter the following number into the field below

847924

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WELCOME

This study is run in collaboration with the University of Zurich.

The study will take between 60 and 90 minutes to complete. You will be able to continue with the study only once you pass two **comprehension checks** about the instructions. Hence, please pay attention.

You will receive a completion payment of € 9 for completing this study.

In addition, you receive an allowance of € 6. Depending on the decisions you make in this study and on luck, that allowance will be increased, reduced, or remain unchanged.

We will pay your total earnings to you through PayPal. We will initiate pament no more than 4 business days after your completion of this study.

*This study involves **NO DECEPTION**. Whenever we tell you that something will happen if you make some decision, then that thing will happen if you make that decision. If we tell you something will happen with an X% chance, then that thing will happen with an exactly X% chance.*

At the end of the survey, you will click a link to a separate survey. On that link, you will enter the information required to process the study payment.

Your study data are completely anonymous. The research team will not have access to the data required for processing payment.

If you have any questions about any part of this study, please send an email to sandro.ambuehl@econ.uzh.ch

By clicking the "continue" button below, you consent to participating in this decision making study.

Your survey ID

The ID you will need to enter for the processing of payments is

1606224523032

We will show you this ID again at the end of the experiment where you will receive the link to enter your payment information.

Please take a screenshot or a picture of this ID.

If, during the course of the experiment, your computer experiences a problem, it is safe to close this window / your browser. To continue with the survey, simply click on the study link in the invitation email again. The survey will automatically continue at the point where you left off.

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Parts and Choices

This study has two parts. The first part has 18 rounds. The second part has 26 rounds.

One part and **one single decision** from that part, determined randomly, will **entirely determine your payment** from this study.

Hence, you should make each decision as if it is the one that counts - because it might be!

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The ventures

In each round of part A you will decide whether to participate in a venture. Ventures can be successes or failures. You will want to participate in successful ventures, and you will want to avoid participating in failures. We'll explain details on the next page.

At the beginning of each stage, you will randomly draw one of 20 ventures, pictured like this:

= venture that will succeed
= venture that will fail

In each round, 20% of the ventures will be successes, the remaining 80% will be failures.

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You will first click a button that will hide whether a given venture is a success or a failure. After clicking, each venture will look grey. Then you will shuffle the ventures three times and pick one at random. That venture will be yours for the round. If you participate in that venture and it is a success, you will gain money. If you participate in it but it is a failure, you will lose money.

Click to see how this will work.

Hide success / failure information

You will first click a button that will hide whether a given venture is a success or a failure. After clicking, each venture will look grey. Then you will shuffle the ventures three times and pick one at random. That venture will be yours for the round. If you participate in that venture and it is a success, you will gain money. If you participate in it but it is a failure, you will lose money.

Click to see how this will work.

If this were a real round, the venture in the rectangle would be yours. Click Next to continue.

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How much money will I gain or lose from a venture?

If you decide not to participate in the venture, your study payment will neither grow nor shrink.

If you decide to participate, the following will happen.

First, you will **receive a payment $X** for participating in the venture (the amount X will vary across the rounds). We call this the ***venture participation payment***.

Second, the venture will either succeed or fail.

- If the venture succeeds, nothing else will happen.
- If the venture fails, you have to **pay damages of € 6.**

Different ventures in different rounds

In some rounds, *if the venture fails, you can keep the venture participation payment* and use it to pay towards the damages. For instance, if the venture participation payment is € 1, and the venture succeeds, you get to keep the € 1. If the venture fails, you'll have to pay the damages of € 6. Using the venture-participation payment of € 1, you will be left with a total loss of $(6 - 1) = € 5.

In other rounds, *if the venture fails, you will lose the venture participation payment, and you will still have to pay the damages*. In the example above, if the venture fails, you would then be left with a total loss of € 6.

We will tell you in each round, whether you will keep the venture participation payment or lose it in the event that you participate in a failing venture.

The amount of damages, € 6, will be the same in every round.

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Chance that the venture will succeed

In each round, you will decide about a new venture.

Any venture will **succeed** with **20%** chance,
any venture will **fail** with **80%** chance,

Hence, any venture is four times as likely to fail as it is to succeed.

Whether the venture in a given round will succeed or fail does not depend on anything that happened in any other round.

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Important: The advisors

In each round, before you decide whether to participate in the venture, you can consult an advisor. The advisor will either recommend that you participate in the venture, or he will recommend that you don't participate.

There are two advisors, the bold advisor, and the cautious advisor. Both advisors know something about the venture, but neither can perfectly predict whether your venture is a success or a failure.

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The **bold advisor** is likely to tell you to participate:

- If the venture is a success, the bold advisor will certainly advise you to participate in the venture.
- If the venture is a failure, there is a 50% chance that he nonetheless (and mistakenly) advises you to participate in the venture.

The **cautious advisor** is likely to tell you not to participate in the venture.

- If the venture is a failure, the cautious advisor will certainly advise that you do *not* participate in the venture.
- If the venture is a success, there is a 50% chance that the cautious advisor nonetheless (and mistakenly) advises you *not* to participate in the venture.

In each round, you will choose whether to get a recommendation from the bold advisor or from the cautious advisor. In each round, you can select only one advisor.

Like in real life, choosing your advisor carefully in each round is important.

Thinking through this decision carefully will help you get the kind of payment you would like from this study, on average.

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In some rounds, you will know how the magnitude of the venture participation payment **before** you choose your advisor. In other rounds, you will learn that number only **after** picking an advisor. (In each round, the venture participation payment will lie between € 0 and € 5, determined randomly by the computer, drawn without replacement.)

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Summary

Here's how each round proceeds:

1. You learn how much money you will get as venture-participation payment if you decide to participate in the venture.
2. You choose an advisor. (In some rounds you'll do that before step 1.)
3. You get a recommendation from the advisor you've chosen.
4. You decide whether or not to participate in the venture.

Recall:
In each round, the chance that the venture in that round is a success is 20%.

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Comprehension check 1 of 2

Please mark all the correct statements, and only the correct statements. If you do not succeed, please review the instructions until you can correctly mark all the statements (click the back button).

If you feel you have understood the instructions, but still cannot continue, send an email to sandro.ambuehl@econ.uzh.ch.

- ☐ Whatever I gain or lose will be added to or discounted from the study payment that I would otherwise get
- ☐ My choice of advisor is irrelevant
- ☐ The venture will succeed whenever the advisor tells me to participate in it.
- ☐ The venture will fail whenever the advisor tells me not to participate in it.
- ☐ The bold advisor will more likely recommend I participate in the venture than the cautious advisor
- ☐ IF the venture will FAIL, the cautious advisor will certainly recommend I refuse it, but the bold advisor will, with a 50% chance, mistakenly recommend I take it.
- ☐ The cautious advisor will more likely advise me not to participate in the venture than the bold advisor
- ☐ The chance that venture will succeed is 20% in each round.
- ☐ IF the venture will SUCCEED, the bold advisor will certainly recommend I take it, but the cautious advisor will, with a 50% chance, mistakenly recommend that I do not participate in the venture.

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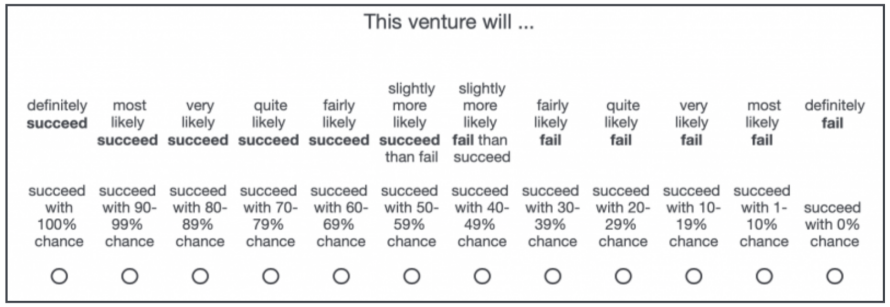
Your confidence about the venture

In each round, after you have decided whether to participate in the venture, we will ask you how certain you are that the venture in that round will succeed (or would succeed, in case you rejected it), in a question such as this:



Your answer to this question may fully determine your payment (see below). In this case, depending on your answer and on luck, your payment will rise by € 5 or fall by € 5.

The payment procedure is designed such that it in your best interest select the answer you genuinely believe is true.

If you believe, for example, that it is about 75% likely that the venture will succeed, it is in your best interest to select “quite likely succeed (70 - 80%)”. If you believe, for example that it is about 25% likely that the venture will succeed (that is, you believe it is about 75% likely that the venture will fail), then it is in your best interest to select “quite likely fail (20 - 30%)".

If this part determines your payment, then you will be paid for **EITHER** for your decision whether or not to participate in the venture in a random round (with a 4 in 5 chance), **OR** for the answer you give to the question above in a random round (with a 1 in 5 chance), but **never for both**.

Click here for further details about the payment mechanism

Click here for further details about the payment mechanism

Here are the details about the payment mechanism and about WHY it is in your best interest to answer this questions according to you true beliefs.

In case you are interested, here are the details about the payment mechanism and about WHY it is in your best interest to answer this questions according to you true beliefs.

The payment procedure works like this. (This procedure is known as the "probabilistic quadratic scoring rule." The first version of it was introduced by Glenn W. Brier in 1950.)

For most choices you can select, there is a range of chances (for example 50 - 60%). Your payment is determined by the number in middle of the range you select (for example 55%, if you select the range 50 - 60 %).Suppose you select a choice for which the middle of the range is some number X. The computer will randomly and secretly draw another number Y between 0 and 100. If the number the computer randomly draws is the larger one, that is if Y > X, then you will win € 5 with chance Y in 100 (and lose € 5 if you don’t win). If the number you stated is the larger one, that is, if X > Y, then you will win if the venture will succeed. So if X is your genuine belief that the venture will succeed, you will win with chance X or with chance Y, whichever of the two is larger.

Why is it in my best interest to answer this question according to my genuine beliefs?

Simply, the reason is that you lower your chance of winning if you state a chance that is lower than you genuinely believe, and you also lower your chance of winning if you state something that is higher than you genuinely believe. So the best you can do is state what you genuinely believe.

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Simply, the reason is that you lower your chance of winning if you state a chance that is lower than you genuinely believe, and you also lower your chance of winning if you state something that is higher than you genuinely believe. So the best you can do is state what you genuinely believe.

To see why, it's best to go through an example.

Here's why you lose from stating a chance that is higher than you genuinely think is true. For example, suppose you genuinely believe the chance that the venture will succeed is 60%, but in the survey question you select something higher, say 90%. Suppose the number Y that the computer draws is between 60% and 90%, let's say it is 80%. This is lower than what you've indicated in the survey question (you've indicated 90%), so you will not play the computers' bet. Instead, you will win if the venture succeeds, which you genuinely think is true with only a 60% chance. The computers' bet would have given you a higher, 80%, chance instead. Hence, you hurt your chance of winning by stating the venture will more likely succeed than you genuinely think.

And here's why you lose from stating a lower chance than you genuinely think is true. For example, suppose again you genuinely believe the chance that the venture will succeed is 60%, but in the survey question you select a lower chance, say 10%. Suppose the number Y that the computer draws is between 10% and 60%, let's say it is 30%. That is higher than what you told us (which is 10%), so you will play the computers' bet and win with chance 30%. That is lower than if you had instead won depending on whether the venture will succeed, which, according to your genuine belief, has a 60% chance. Hence, you hurt your chance of winning by indicating a lower chance than you genuinely think.

Therefore, the best you can possibly do is to select exactly the answer that corresponds to your genuine beliefs.

If you have any questions about this payment mechanism, please send an email to sandro.ambuehl@econ.uzh.ch.

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Recall:

Your payment is determined by **one single decision from one single round** of this study, determined at random.

Hence, you should make each decision as if it is the one that counts - because it might be!

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Comprehension check 2 of 2

Please mark all the correct statements, and only the correct statements.

If you do not succeed, please review the instructions until you can correctly mark all the statements.

- ☐ At the end of the study, the computer will randomly select ONE round. My payment will depend on what happened during that SINGLE round alone.
- ☐ When I am asked about my confidence about the venture, I will earn the most if I state something a little higher than I truly think
- ☐ At the end of the experiment, the computer will randomly select TWO rounds. My payment will depend on what happened during BOTH of these rounds.
- ☐ At the end of the study, the computer will sum up all my wins and losses over all the rounds. My payment will depend on the total amount of those wins and losses.
- ☐ When I am asked about my confidence about the venture, I will earn the most if I state exactly what I truly think
- ☐ When I am asked about my confidence about the venture, I will earn the most if I state something a little lower than I truly think

← →

Part A of this study starts now.

← →

The following six screenshots display one arbitrary round. The remaining rounds proceed in a similar way.

Round 1 of 16

If you participate in the venture, you will get a venture participation payment of

€ 2

If the venture fails, you will have to pay **damages** of € 6. But you can **keep the venture participation payment**, and use it to pay towards the damages.

If you do not participate in the venture, your bonus will be unaffected.

→

Randomly draw the venture for this round

= venture that will succeed
= venture that will fail

Shuffle the ventures three times. Then click the button to randomly select one of the ventures.

Hide success / failure information

Randomly draw the venture for this round

✅ = venture that will succeed
❌ = venture that will fail

Shuffle the ventures three times. Then click the button to randomly select one of the ventures.

Shuffle all ventures

Randomly draw the venture for this round

✅ = venture that will succeed
❌ = venture that will fail

Shuffle the ventures three times. Then click the button to randomly select one of the ventures.

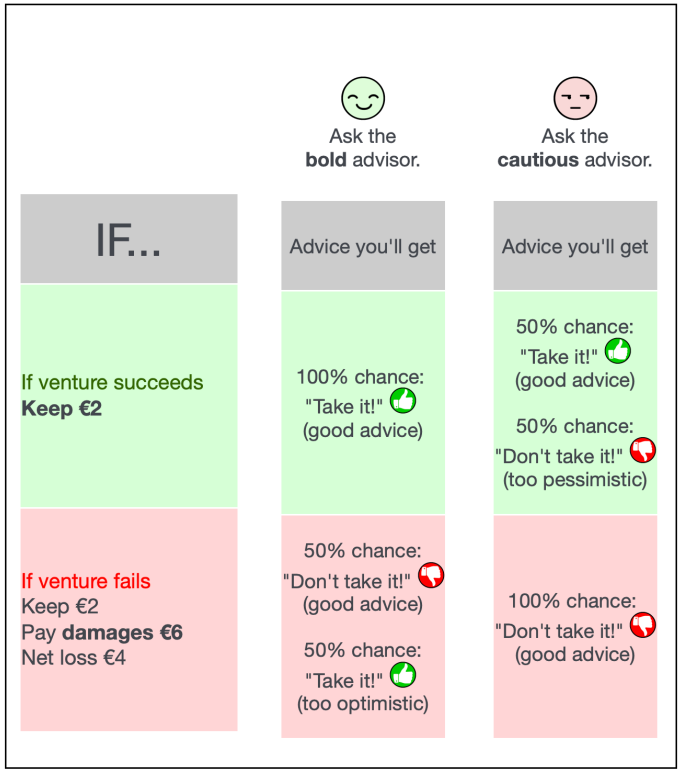
The venture in the rectangle is yours in this round

→

Select your advisor

If you participate in the venture, you will
get € 2

Recall: the venture will succeed with 50% chance, it will fail with 50% chance.



If you participate in the venture, you will
get € 2

If the venture fails, you will pay **damages of € 6** towards which you can use the venture-participation payment (so you **lose a total of € 4**).

Recommendation

The **cautious advisor** recommends:

Your decision:

Participate in the venture ○

Don't participate in the venture ○

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How sure are you whether the venture in this round would succeed, given the recommendation you got?

(The **cautious advisor** recommended that you don't participate).

This venture will ...

definitely **fail**	most likely **fail**	very likely **fail**	quite likely **fail**	fairly likely **fail**	slightly more likely **fail** than succeed	slightly more likely **succeed** than fail	fairly likely **succeed**	quite likely **succeed**	very likely **succeed**	most likely **succeed**	definitely **succeed**
succeed with 0% chance	succeed with 1-10% chance	succeed with 10-19% chance	succeed with 20-29% chance	succeed with 30-39% chance	succeed with 40-49% chance	succeed with 50-59% chance	succeed with 60-69% chance	succeed with 70-79% chance	succeed with 80-89% chance	succeed with 90-99% chance	succeed with 100% chance
○	○	○	○	○	○	○	○	○	○	○	○

The number below each option is the percentage chance with which you think that the venture will succeed.

Recall that it is your best interest to state your genuine belief, that there's a 1 in 5 chance that you will be paid according to this type of decision, and that depending on your decision, you could win or lose € 5.

If you like, you may now go back to change your decision on whether to participate in the venture or not.

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Part B of this study.

This part of this study has 26 rounds. In each of them, you will face several decisions such as the one below. In each decision, you choose between a lottery and a sure amount of money. In some decisions, the sure amount of money is a gain, in other decisions, the sure amount of money is a loss.

Here is an example of one such decision (X and Y will be replaced with specific numbers):

Which of the following two options do you prefer?

Receive $X with p% chance, lose $Y with q% chance.	Lose $1 for sure
○	○

←

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Payment for this part

If your study payments are determined according to this part of the study, here's what will happen.

The computer will randomly select one of the decisions you have made in this part. If you chose the gamble, you will play the gamble. Gains will be added to your budget of € 6, losses will be discounted. If you rejected the gamble, your payment will grow or shrink by the money amount you chose instead of the gamble.

Hence, you should make every decision as if it is the one that counts, because it might be!

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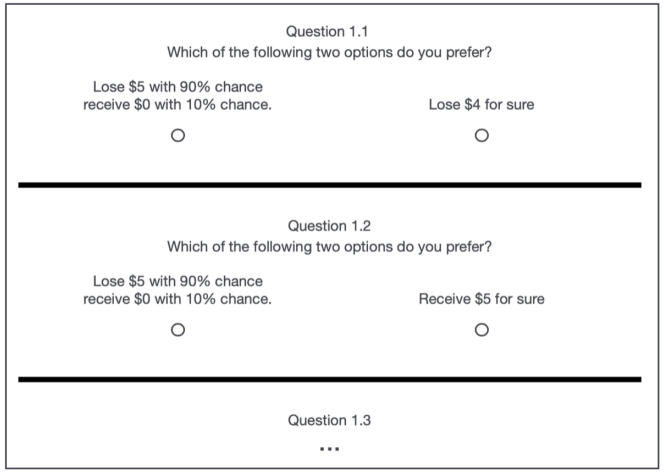
In each round, you will proceed through a list of questions like this:



Important: **Each row of the list is a *separate* decision**. All of your decisions are choices between a gamble and a sure gain (or loss) of money.

In particular, in a list like the above, your decision is NOT whether you prefer receiving $5 to losing $4 for sure (we already know the answer to that question).

Instead, in the above table you see two questions. In the first question (top half), you decide whether you'd rather play the gamble or whether you'd rather lose $4 for sure. In the second question (bottom half) you choose whether you'd rather play the gamble or whether you'd rather receive $5 for sure.

Questions in which both alternatives are unattractive
In rows of some tables you may dislike both the gamble and the sure amount. For instance, in the first row of the list above, both options involve losing money. In these cases, too, it will be in your own best interest to choose whichever option you like more (that is, whichever option you dislike less). The reason is that if that first row happens to be randomly selected to determine your study payment, you'll be better off having selected the option you dislike less of the two.

Your choices have *no bearing* on which round or which row of which list will be selected for determining your payment.
That selection is entirely random.

Your decisions for part B start now.

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In each question, choose the option you genuinely prefer.

In each question you will decide between losing / receiving a certain amount of money and the following lottery (which is the same in all questions on this page):

Receive € 4 with 11% chance,
lose € 2 with 89% chance.

Each row is a *separate* decision!

Question 1.1

Which of the following **two** options do you prefer?

Receive € 4 with 11% chance, lose € 2 with 89% chance.	**Receive** € 4.5 for sure
○	○

Question 1.2

Which of the following **two** options do you prefer?

Receive € 4 with 11% chance, lose € 2 with 89% chance.	**Lose** € 3 for sure
○	○

Question 1.3

Which of the following **two** options do you prefer?

Receive € 4 with 11% chance, lose € 2 with 89% chance.	**Receive** € 0.5 for sure
○	○

This page includes an additional 8 questions of a similar format, displayed in random order. The survey continues with 25 additional similar pages.

You have completed the decision making part of this study.

We would now like to ask you some questions. Your answers will not affect your payment.

A bat and a ball cost $5.50 in total. The bat costs $5.00 more than the ball.
How many cents does the ball cost?

If it takes 10 machines 10 minutes to make 10 widgets,
how many minutes would it take 100 machines to make 100 widgets?

In a lake, there is a patch of lily pads. Every day, the patch doubles in size. If it takes 24 days for the patch to cover the entire lake, how many days would it take for the patch to cover half of the lake?

If you're running a race and you pass the person in second place, what place are you in?

- ○ First
- ○ Second
- ○ Third

A farmer had 15 sheep and all but 8 died. How many are left?

Emily's father has three daughters. The first two are named April and May. What is the third daughter's name?

How many cubic meters of dirt are there in a hole that is 3 meters deep, 3 meters wide, and 3 meters long?

← →

Questions about yourself

Please describe yourself truthfully.

I see myself as someone who...

	Disagree strongly	Disagree a little	Neither agree nor disagree	Agree a little	Agree strongly
... Can be somewhat careless	○	○	○	○	○
... Tends to be disorganized	○	○	○	○	○
... Perseveres until the task is finished	○	○	○	○	○
... Does a thorough job	○	○	○	○	○
... Is easily distracted	○	○	○	○	○
... Is a reliable worker	○	○	○	○	○
... Makes plans and follows through with them	○	○	○	○	○
... Tends to be lazy	○	○	○	○	○
... Does things efficiently	○	○	○	○	○

← →

What is your gender?

- ◯ Male
- ◯ Female
- ◯ Other (e.g. genderqueer)

What is your age?

What is your native language?

- ◯ German
- ◯ English
- ◯ Other. Please indicate.

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What type of degree are you currently working towards?

- ◯ Undergraduate degree (BA, BSc, etc.)
- ◯ Masters degree (MA, MSc, etc.)
- ◯ Doctorate
- ◯ I am not a student

Have you ever taken a course in statistics?

- ◯ Yes
- ◯ No

Have you ever taken a course in probability theory?

- ◯ Yes
- ◯ No

If you know it, please enter the name of the following mathematical formula (i.e. the last name of the person after whom the result is named):

←

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What type of degree are you currently working towards?

- ◯ Undergraduate degree (BA, BSc, etc.)
- ◯ Masters degree (MA, MSc, etc.)
- ◯ Doctorate
- ◯ I am not a student

Have you ever taken a course in statistics?

- ◯ Yes
- ◯ No

Have you ever taken a course in probability theory?

- ◯ Yes
- ◯ No

If you know it, please enter the name of the following mathematical formula (i.e. the last name of the person after whom the result is named):

$$P(A|B) = \frac{P(B|A)P(A)}{P(B)}$$

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At which faculty do you study?

- ◯ Wirtschafts- und Sozialwissenschaftliche Fakultät
- ◯ Rechtswissenschaftliche Fakultät
- ◯ Medizinische Fakultät
- ◯ Philosophische Fakultät
- ◯ Mathematisch-naturwissenschaftliche Fakultät
- ◯ Humanwissenschaftliche Fakultät
- ◯ I am not a student

In which Bundesland have you completed your Abitur?

- ◯ Baden-Württemberg
- ◯ Bayern
- ◯ Berlin
- ◯ Brandenburg
- ◯ Bremen
- ◯ Hamburg
- ◯ Hessen
- ◯ Mecklenburg-Vorpommern
- ◯ Niedersachsen
- ◯ Nordrhein-Westfalen
- ◯ Rheinland-Pfalz
- ◯ Saarland
- ◯ Sachsen
- ◯ Sachsen-Anhalt
- ◯ Schleswig-Holstein
- ◯ Thüringen
- ◯ I have completed the International Abitur
- ◯ I do not have an Abitur
- ◯ I prefer not to say

What is the average of your grades in the Abitur?

Which grade did you achieve in your Abitur **in mathematics**?

What grade did you achieve in your Abitur in **German literature and language**?

Did you complete **mathematics** as Leistungskurs in your Abitur?

- ◯ Yes
- ◯ No
- ◯ I do not have an Abitur

Did you complete **German literature and languge** as Leistungskurs in your Abitur?

- ◯ Yes
- ◯ No
- ◯ I do not have an Abitur

How much money do you spend per month, on average (including rent, food, transportation, etc.)?

How much money do you earn per month, on average, through your own work?

How much money do you receive from your parents each month?

What is the approximate wealth of your parents (including houses and other real estate)?

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Your payment for this study.

As explained in the instructions, the computer randomly selected one round of the experiment to determine your payment.

You are paid by one of your decisions whether to take one of the gambles. You decided to take the gamble. You won. Hence, X will be added to your allowance.

Your total bonus from this study is therefore €Y

In addition, you will receive the completion payment of € 9.

Click Next so you can enter your information for receiving your study payment.

←

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