## Abbreviated version of the questionnaire (originally in German)<sup>1</sup>

Dear student: We would like to thank you for your willingness to participate in an experiment of the International Relations Chair at the University of Konstanz.

The questionnaire is the basis for an experiment in which we examine the behavior of actors. The experiment deals with the way in which individuals distribute goods and money in case of conflict.

You are one of the participants in this experiment. Your goal is to reach the solution that is personally best for you. The result does, however, not only depend on your decision. Equally important is the behavior of another, randomly selected interaction partner. When you make a decision, you have to take the probable actions of your interaction partner into account.

It is possible in our experiment that you will receive objects and a modest sum of money through your bargain with another person. You will obtain the goods and the money as a reward once the experiment is completed.

The following information is only meant for your personal usage. Do not talk about it with anyone. The questionnaires are coded in a way that we can use it for statistical examination, but your anonymity will be preserved throughout the whole examination and analysis. We would like to stress particularly that it will not be possibly to identify afterwards which person stands for which responses. Data protection is thus entirely guaranteed.

General remarks: You will receive at least about 10 German Mark<sup>2</sup> for your participation in this experiment. You can receive a higher payoff depending on your and your interaction partner's actions. Your reward will partly take the form of goods for daily use. Losses occurring in the interaction with the other person will be deduced from your participation premium. This will happen however only to such an extent that you will still receive a reward for your participation at the end of the experiment. You will receive the premium and the additionally won goods as soon as the experiment is completed. Your participation number is .....

Ask the instructor if you do not understand something or if you have other questions.

We would like you to wait until the instructor is in the room. Do never leave the room during the experiment.

**Rules of the experiment:** You take part in a decisional experiment in which two people participate. We have randomly selected an interaction partner for you. This actor will only know your decision, but neither your name nor your participation number. This implies that your actions will remain anonymous.

The experiment is divided into two phases that we call the "selection" and the "division phase". In the selection phase you select a division procedure. The other actor is your partner at this stage. In the first part of the experiment we present to you three procedures with which goods are divided among different individuals. Your will apply the procedure you have jointly chosen at the division stage. During this experimental phase we will present to you some goods that you can receive at the end of the experiment from us.

<sup>&</sup>lt;sup>1</sup> This questionnaire only relates to the adjusted Knaster procedure in the second stage of the experiment. A complete questionnaire can be downloaded from <a href="http://www.uni-konstanz.de/FuF/Verwiss/GSchneider/">http://www.uni-konstanz.de/FuF/Verwiss/GSchneider/</a>. Words that appear in bold or italics in the original are printed here in normal fonts.

<sup>&</sup>lt;sup>2</sup> At the time the experiments were conducted in the year 2001, one German Mark corresponded roughly to 0.5 Euros or 0.5 US-Dollars.

**Statements**: The following questionnaire contains a number of statements. Read each statement and decide whether or not it applies to you. Check the response that is correct from your point of view. Consider that there are no "right" or "wrong" answers. Take a look at the following example:

	Statement	Mainly	Mainly
		right	wrong
1	I am a social person		

- ⇒ If a statement is right or generally right from your point of view mark the check box "Mainly right."
- ⇒ If a statement is wrong or normally not right from your point of view mark the check box "Mainly wrong."
- ⇒ If a statement does not apply to you or if you do not know anything about it, do not mark either check box. But try to answer each judgment.

Please give your own opinion. It is important that you respond as carefully and sincerely as possible.

If you like to change an answer, blacken the entire check box and mark the new box.

Remember to respond to each statement. Now turn the page and begin.<sup>3</sup>

- 1) I am a very social person.
- 2) It often happens that I am worried about something.
- 3) I sometimes think about things that are too bad to talk about.
- 4) I like to read newspaper articles about court and criminal cases.
- 5) It would certainly be best for me if I kept silent when I am in trouble.
- 6) If someone does something wrong to me, I have the feeling that I should pay back if I can, also out of principle.
- 7) My parents are economical, diligent people who place high priority on order and neatness.
- 8) I would like to dress in expensive cloth.
- 9) Sometimes I would like to swear.
- 10) It would be best if almost all laws would be abolished.
- 11) I have made strange and foreign experiences.
- 12) I belong to the kind of people who do not easily accept to be pushed around.
- 13) I received at one or several occasions a strict recrimination because of bad behavior.
- 14) I do not always say the truth.
- 15) I believe that most people would lie if it were advantageous for them.
- 16) At elections I sometimes vote for people of whom I know very little.
- 17) I have never done something dangerous out of pure excitement.
- 18) Races or games are more pleasurable for me if I bet during them.
- 19) I am a very economical person and cannot stand lavishness.
- 20) I believe that I was often punished without reason.
- 21) Most people are honest because they fear to be caught.
- 22) In school I sometimes had to go to the principal because of my bad behavior.
- 23) I do not read each day all the newspaper commentaries.
- 24) Law and order are very important for me.
- 25) I liked to go to school.
- 26) Most people would rather prefer unfair means to achieve a gain or advantage.
- 27) I do not feel very comfortable with a task that requires swift action and endangers other people.
- 28) I seldom or never feel dizzy.
- 29) I sometimes postpone tasks to the next day that I should do today.
- 30) I like to read books dealing with the natural sciences.
- 31) If I could enter a cinema without paying and being seen, I would probably do it.
- 32) I like to animate when I am bored.
- 33) I am interested in the natural sciences.
- 34) Sometimes I laugh about a dirty joke.
- 35) When I am shopping I compare and think long before I buy something.
- 36) I like to go hunting.
- 37) If I do not feel well, I easily stress out.
- 38) My parents rejected the kind of people with whom I spent my time.

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<sup>&</sup>lt;sup>3</sup> Check boxes are suppressed.

- 39) I do not blame people for trying to obtain everything they can possibly get on this world.
- 40) I am afraid when I am alone on a large square.
- 41) I do not blame anybody for exploiting people who let him or her do so.
- 42) I was only learning slowly at school.
- 43) If some people do not share my point of view, I can most often convince them.
- 44) I sometimes get angry.
- 45) I have never been in conflict with the law.
- 46) At home much attention was paid to order, cleanliness, politeness and effort.
- 47) I sometimes gossip a bit.
- 48) I was sometimes so excited about the cleverness of some criminals that I hoped they would remain unpunished.
- 49) In school I found it very difficult to speak in front of the class.
- 50) If a polite and agreeable manner does not pay off, I can be hard and select a forceful tone.
- 51) My table manners are not as good at home as among other people outside of my home.
- 52) It often happened that people were envious about my ideas only because they did not have them before me.
- 53) When I was young, I often did not go to school although I should have done so.
- 54) Most people make friendships because they can benefit from friends.
- 55) I do not like all the people I know.
- 56) In monetary matters I am very considerate and concerned about security.
- 57) If several people get into trouble, it is best that they agree on an excuse and stick to it.
- 58) I would like to be a car racer.
- 59) People who entice others to steal by letting precious objects lay around are almost as culpable as the thieves themselves.
- 60) It is completely natural to me to complain if I am served badly in a restaurant or receive bad food.
- 61) There is nothing to reproach if someone goes around the law without really breaking it.
- 62) I am quite often regretful to be so moody and short-tempered.
- 63) I believe that almost everyone would tell lies to prevent difficulties.
- 64) My grades on social conduct in school were usually bad.
- 65) I would prefer to win rather than to lose in games.
- 66) Fire fascinates me.
- 67) Most people would prefer unfair means to advance in life.
- 68) There is nothing to object if someone stretches the law as long as it is not really broken.
- 69) When others do something wrong, I tell them most often what I think.
- 70) I rather prefer to figure out myself how something works than to ask someone else to show it to me.
- 71) I like to get to know important people because I can then feel important myself.
- 72) There are certain people I dislike so much that I am deeply gratified when they are punished for something they have done.
- 73) Many people are guilty of bad sexual behavior.

In the following you find other statements. You shall once again decide which one applies more to you. This time you should decide between two alternatives. The following example should make it clearer how to proceed.

I learn more easily if I... a) read a well-written text or b) participate in a group discussion.

If you learn better by reading a well-written text, then choose the first response. If you learn better by participating in a group discussion, then choose the second option.

Recall that you have to give your own opinion. It is also important in this part that you respond as diligently and sincerely as possible.

If you would like to change an answer, blacken the entire box and mark the new check box.

Remember that you should always make a choice.

Now turn the page and commence.

- 74) If others do something that bothers me I most often do the following: a) I leave it at that or b) I let them know it.
- 75) I prefer to have friends who ... a) are calm or b) are lively.
- 76) When I notice that someone is erring I usually do the following: a) I point it out or b) I leave it at that.
- 77) In dealing with other people it is best ... a) to put one's cards on the table or b) to keep them very close to one's chest.
- 78) In situations of conflict I belong to those ... a) who are self-confidently adamant with their opinion or b) give in for the sake of peace.
- 79) I believe to succeed better in ... a) responding to challenges or b) respecting the wishes of others.
- 80) To start a talk with strangers ... a) is never difficult for me or b) is difficult for me.
- 81) When I have to do familiar, routine work, I feel ... a) bored and tired or b) sure of myself and self-confident.
- 82) Other people consider me to be rather .... a) cooperative and flexible or b) resolute and steadfast.

**Rules of the selection part**: Your interaction partner is in another room. It is your task in this part of the experiment to choose a division procedure.

Please read carefully through the description of the different procedures. We will ask you and your interaction partner afterwards to choose one procedure.

*Procedure 1:* In this procedure it is planned that you distribute 100 points among a number of indivisible goods. This should be done in a way that you allocate the largest number of points to the good you would like to obtain the most. You also have a certain sum of money at your disposal. Your interaction partner will also distribute 100 points among these goods in accordance with his or her preferences.

The following rule applies: The good will go to the one person among the two of you who allocates the highest number of points to it.

The following example illustrates the mechanism:

	Good 1	Good 2	Good 3	Total
Valuation person 1	6	67	27	100
Valuation person 2	5	34	61	100

Person A obtains goods 1 and 2 (73 of his points), person B obtains good 3 (61 of her points).

A redistributive scheme will guarantee afterwards that the person with fewer points can count on a compensation. This means in the example under consideration that person A has received goods with a value of 73 points, but person B only with a value of 61 points. An equalization of the payoffs will be reached when person A compensates person B. This would then be the case if person A gives half of the utility difference away that exists between him and his interaction partner. This would be six points in our example so that both partners will have achieved 67 points after the compensation. Each point corresponds to a certain sum of the cash that you would be given at the beginning of the procedure.

Once you or your partner has made the compensation, each of you will receive the payoff in form of the goods and the money. The experiment will be completed at this moment.

Procedure 2: Here as well, you should distribute natural goods and money among the two of you.

According to this procedure, each of you has the right to a share of 50 % of the goods under consideration. This means that the person who receives a good has to give 50 % of its value to his or her interaction partner.

You have again 100 points at your disposal that you have to distribute among the goods. You should value the good the highest that you would like to obtain the most.

The procedure implies that the person who values a good the highest will obtain it. This person will give 50 % of the value of the good as a compensation to her interaction partner.

Example:

	Good 1	Good 2	Good 3	Total
Valuation	6	67	27	100
person A				
Valuation	5	34	61	100
person B				

Person A thus receives good 1 and 2, person B receives good 3.

To reach an outcome equally valued by both persons, both persons will give 50 per cent of the value of the good they received to their interaction partner.

Person A thus gives 50 % of the value of good 1 and good 2 to person B, person B in return yields 50 % of the value of good 3 to person A.

As soon as the goods are distributed and the compensations paid the payoff will belong to you. The experiment will end with this.

*Procedure 3:* This procedure, too, deals with the task of distributing a certain number of goods and cash among the two persons.

One of you will be person A, the other one person B. Person A will distribute the goods and the money that are about to be distributed into two parts according to his/her own estimation.

Person B will subsequently decide which part she would like to have. Person A will obtain the other one

The coach will decide by chance which actor will play which role.

Example:

Three indivisible goods and certain sum of money are to be divided. Person A makes the following division.

Share 1: Good 1 + Good 3 + 10 % of the cash

Share 2: Good 2 + 90 % of the cash

Person B then decides which part he would like to obtain. He decides in favor of 1. Person 2 will consequently receive 2.

The experiment ends with the two persons obtaining their share.

You know now the three distributional procedures from which you can choose. We would like you to answer one question to each procedure  $(...)^4$ 

To control for a non-intended, systematic bias, we would like you to answer the following questions in a truthful manner:

Sex: $\square$ Male $\square$ Female
Age:
Smoker: □ Yes □ No
Main subject enrolled in:
Number of semesters:
Did you participate earlier in an experiment: ☐ Yes, once ☐ Yes, several times ☐ Never
We would now like you to make a decision in favor of one of the procedures.

Distribute 100 points among the three procedures. Do this in a way that you attribute the highest value to the procedure that you would like to use in the division of goods and cash. Your interaction partner is also asked to distribute 100 points among the procedures.

We will play the procedure that receives the largest aggregate number. Take into account that you will possibly play several rounds with the same partner. You and your partner will remain completely anonymous during these interactions.

Distribute your 100 points now. The coach will collect your valuations, analyze them and tell you afterwards which procedure will be used later. You will then receive instructions for this procedure.

<sup>&</sup>lt;sup>4</sup> An English version of the control questions which are excluded from this appendix can be obtained from the authors upon request.

Procedure	Procedure	Procedure	Total
1 (AW)	2 (PA)	3 (DC)	
			100

You see now on the table in front of you some goods. Please order the lighter, the ball pen and the mug according to what you would like to possess the most:

My preferred object is	
My second preferred object is	
The least preferred object is	

The monetary value of each good amounts to about 5 German Mark. In addition you have a capital stock of 10 DM at your disposal.

We would like to present the procedure once again to refresh your memory.

• You have 100 points at your disposal you can freely distribute among the three goods.

You attribute the highest value to the good you prefer the most.

- Your interaction partner will also distribute 100 points.
- The one of you who attributes the largest number of points to a good will receive it.

The following example illustrates the mechanism:

	Good 1	Good 2	Good 3	Total
Valuation person A	6	67	27	100
Valuation person B	5	34	61	100

Person A thus receives good 1 and 2 (73 of his points), person B receives good 3 (61 of her points).

Compensatory payments are calculated afterwards. They guarantee that you can profit in an equal manner from the division. This is the reason as to why we compare the points that you and your interaction partner attributed to the goods. An equivalent result is reached if person B compensates person A.

In the example under consideration person A received goods with a value of 73 points, but person B only goods with a value of 61 points. A compensation payment of 6 points would guarantee that both persons reach 67 points after A compensated B. A point in the compensation payment is equivalent to a value of 0,1 DM.

Please distribute your 100 points among the tree goods in table 1 on the enclosed sheet.

The coach will now present to you the valuation of your interaction partner. Since you know now the valuation of your interaction partner, we would like you to distribute your 100 points once again. Now fill in your second valuation. The coach will shortly collect your valuation – which you please put into the envelope – and calculate the compensation payment. Note that only completely and correctly filled out decision sheets will be used for the analysis of the experiment. The coach will now analyze the valuation and inform you about the outcome.