Social Value Orientation among Swiss Adolescents in the Context of the Transition from Education to Employment

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Outline

Introduction

- Social preferences (e.g. prosociality and altruism vs. individualism and competitiveness) are, without doubt, important ingredients to human interaction.
- It appears scientifically relevant to quantify how social preferences are distributed in a society, how social preferences shape decisions, and how social context is relevant for the formation of social preferences.
- The SVO (social value orientation) slider measure propagated by Murphy et al. (2011) received quite some attention as a promising approach to measure social preferences.
- The instrument, however, has mostly been employed in lab experiments and online studies with convenience samples. There is little experience with the instrument in representative population surveys (see Ehlert et al. 2021 for an exception).

Introduction

- We implemented the SVO measure in two waves of the 2nd cohort of the TREE (Transitions from Education to Employment) panel study (in wave 2 when respondents were about 17, and in wave 6 at age 21).
- A goal was to evaluate how educational decisions are related to social preferences. We were also interested in how social preferences are shaped by occupational socialization.
- In this talk I will present some results on how the instrument performed in our study, how social preferences are distributed in our representative sample, and how social preferences evolved during the transition from education to employment.

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3. Implementation in TREE
4. Results
   - Distribution of SVO angles and types
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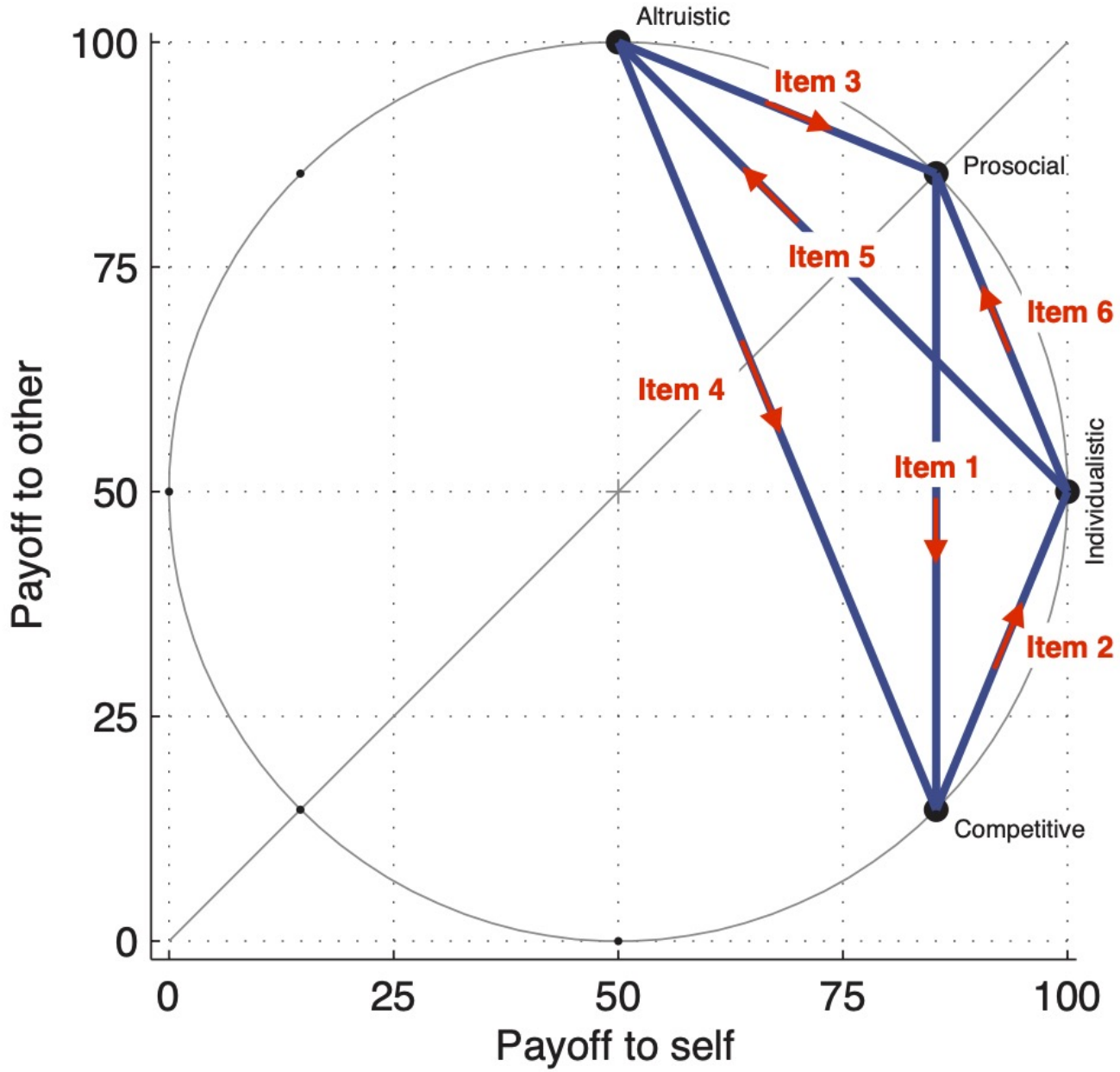
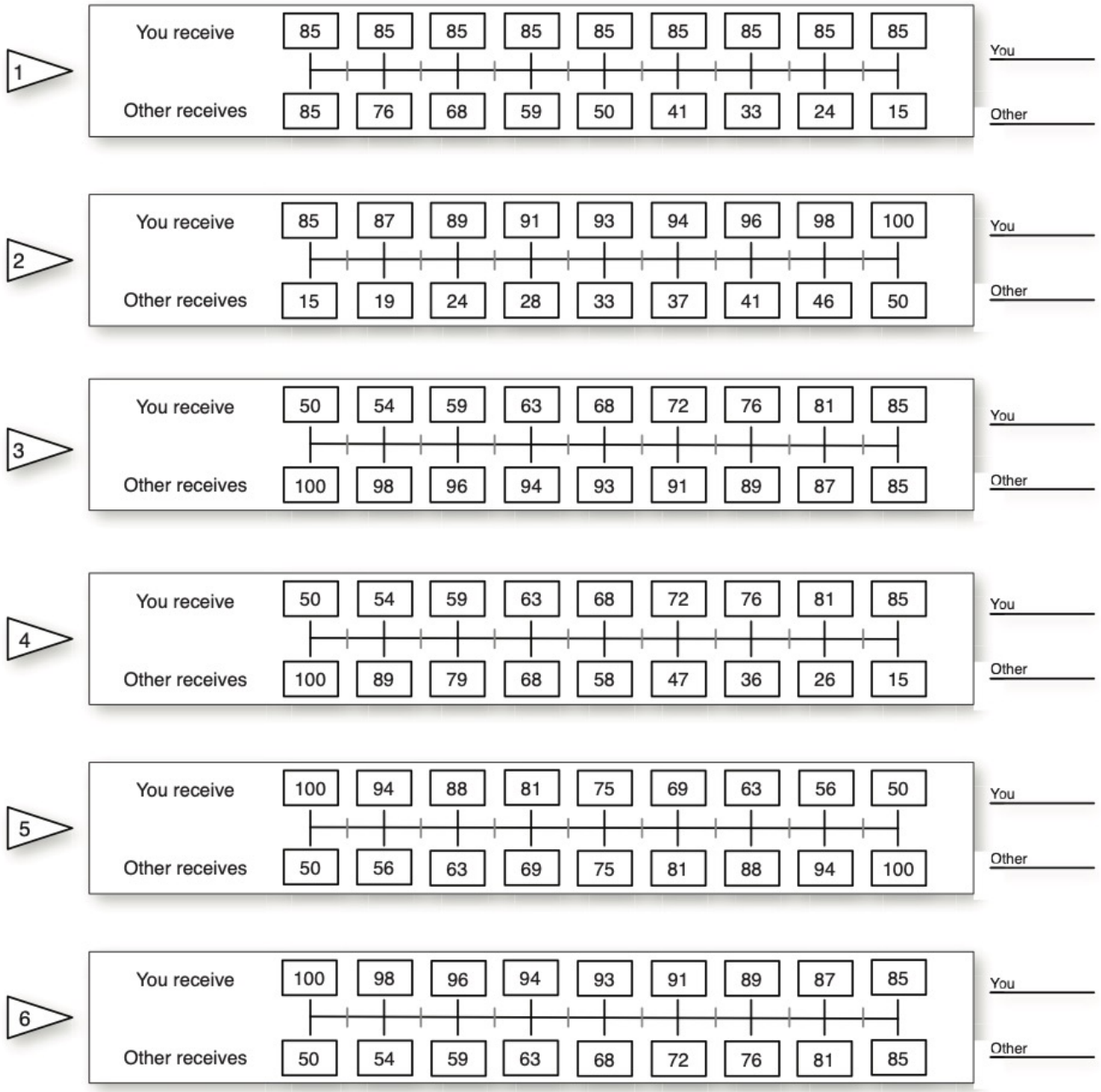
   - SVO and socio-demographic background
   - Stability of SVO measurement over time
   - Social preferences and vocational choice vs. socialization
5. Conclusions

The SVO slider measure



(Murphy et al. 2011; annotated)



(Murphy et al. 2011)

The SVO slider measure

- We focus on the six primary SVO slider items that are used to distinguish between altruism, prosociality, individualism, and competitiveness. (Murphy et al. 2011 also present an extended variant including an additional set of nine secondary items.)
- The instrument is incentivized: respondents receive payoffs corresponding to their decisions and their decisions affect the payoffs of others.
- The "SVO angle" on the ring measure is computed as

$$\text{SVO angle} = \arctan\left(\frac{\sum \text{payoff other} - 50}{\sum \text{payoff self} - 50}\right)$$

- Murphy et al (2011) then suggest to classify social preferences as follows:

Type	SVO angle
Altruistic	greater than 57.15
Prosocial	between 22.45 and 57.15
Individualistic	between -12.04 and 22.45
Competitive	less than -12.04

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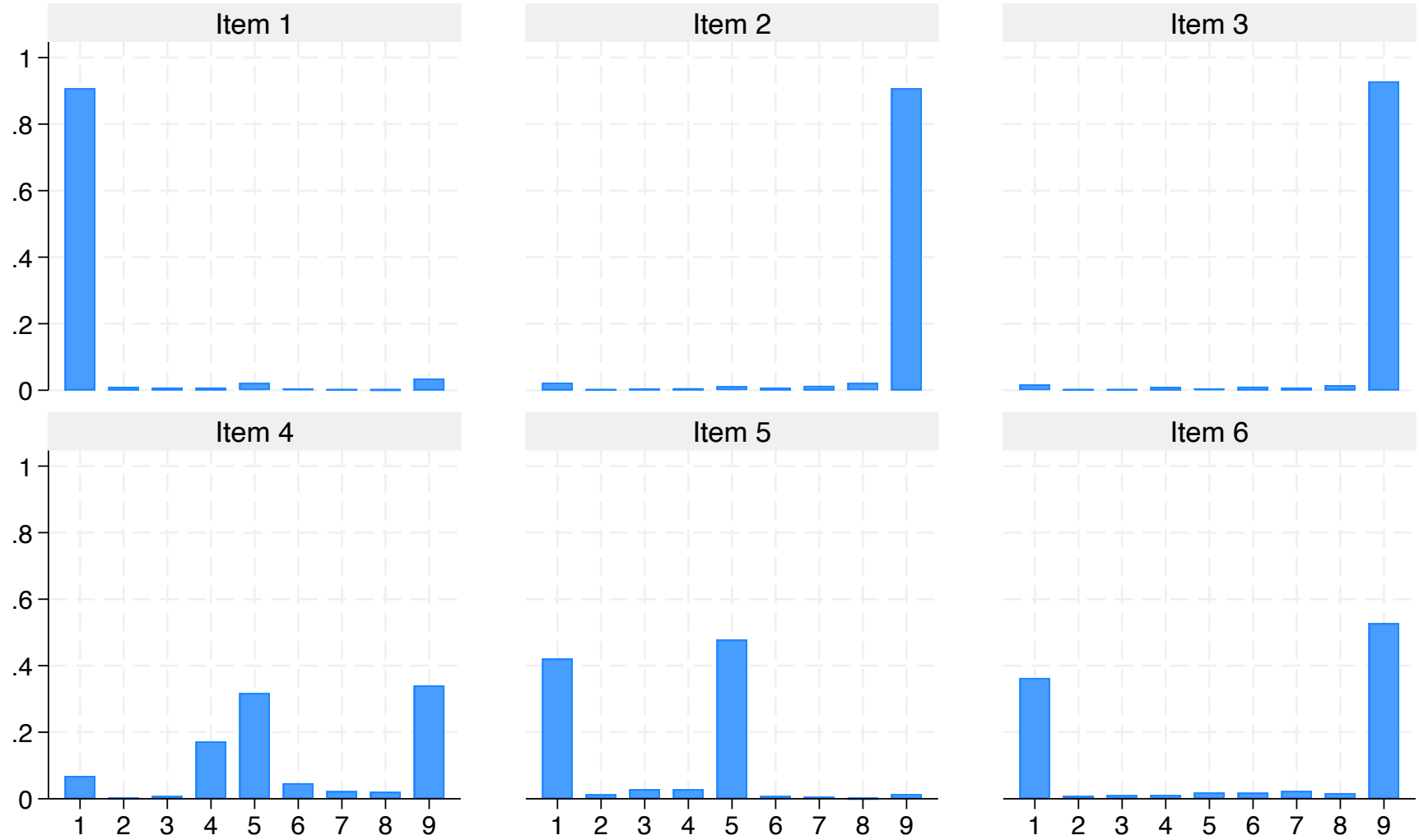
Implementation in TREE

- The implementation of the instrument suggested by Murphy et al. (2011) in a general population survey is challenging (lengthy instruction, complex task, high respondent burden).
- For our implementation we simplified the instructions as much as possible to make the instrument feasible for self-administered online interviews.
- The use of digital sliders was discarded for technical reasons (to many problems to be expected). Furthermore, the 9-point scale used in most SVO implementations appears not very convenient for a survey that is completed by most respondents on a mobile device.
- We thus reduced the decision tasks to 5-point scales. This seems unproblematic as for most of the six items only the endpoints and the middle really matter.

Example: MTurk Study by Höglinger and Wehrli (2016)

(N = 1109)

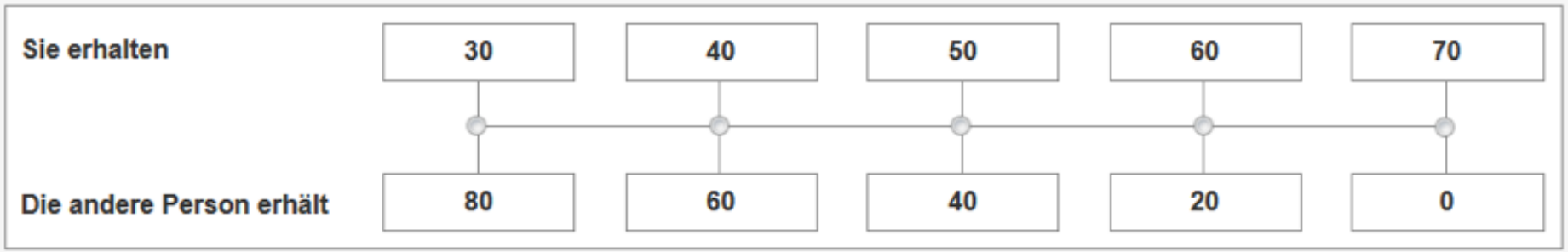


Implementation in TREE

Verteil-Spiel mit Gewinn-Chancen

Bei den folgenden sechs Fragen können Sie einen Geldbetrag zwischen Ihnen selber und einer anderen Person aufteilen. Sie haben jeweils die Wahl zwischen fünf Möglichkeiten der Verteilung.

Hier ein Beispiel:



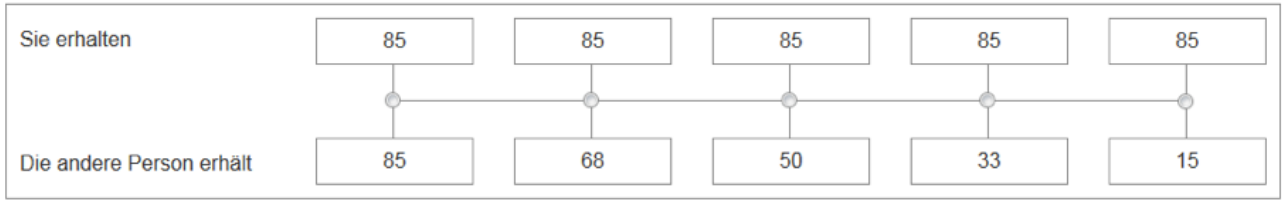
Wenn Sie in diesem Beispiel auf den Button zwischen 50 und 40 klicken und falls Sie ausgelost werden, dann würden Sie 50 Franken und die andere Person 40 Franken erhalten.

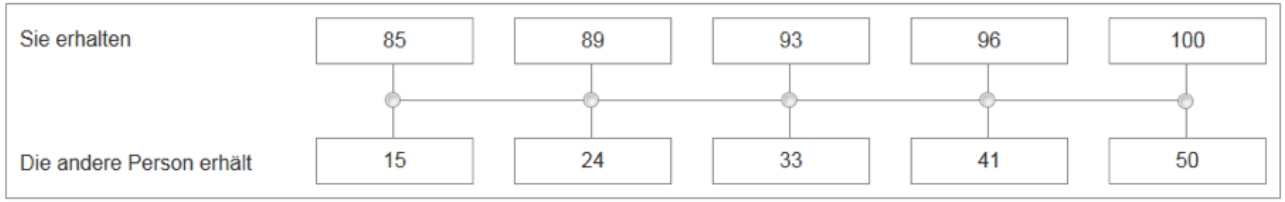
Es bleibt völlig Ihrem Gutdünken überlassen, welche Wahl Sie treffen. Die andere Person ist zufällig aus den Teilnehmerinnen und Teilnehmern unserer Studie ausgewählt worden. Weder Sie noch die andere Person werden voneinander erfahren.

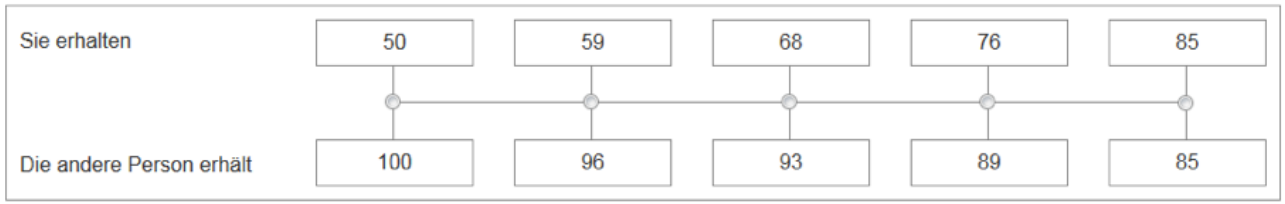
Wer die Fragen beantwortet, nimmt an einer Gewinn-Verlosung teil. Eine von zwanzig Personen erhält dabei einen Gewinn. Falls Sie ausgelost werden, wird das Geld genau so ausbezahlt, wie Sie es in einer der folgenden Fragen angegeben haben. Und zwar an Sie und die andere Person. Ihre Antworten können also bei jeder Frage durchaus "Konsequenzen" haben. Falls die andere Person ausgelost wird, bekommen Sie als Gewinn den Anteil ausbezahlt, den sich die andere Person für Sie ausgedacht hat.

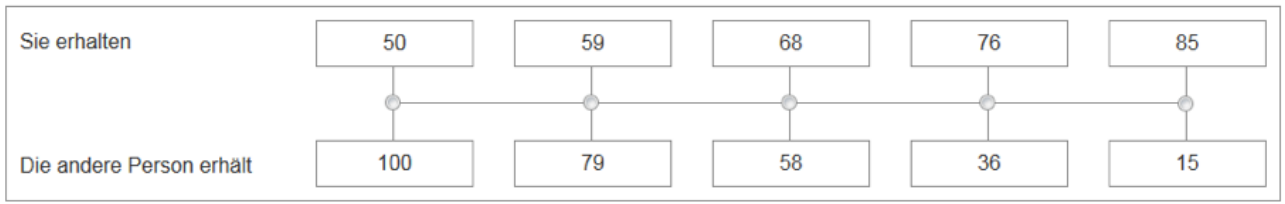
Alle Gewinnerinnen und Gewinner werden nach dem Ende der Umfrage (ca. August 2018) informiert. Der Gewinn wird per Post ausbezahlt.

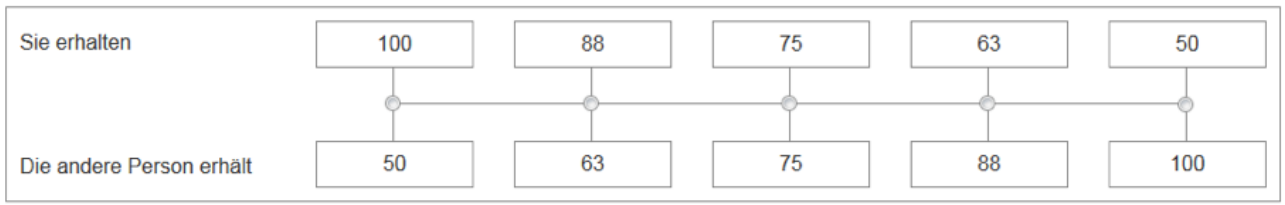
Welche Aufteilung würden Sie am meisten bevorzugen?

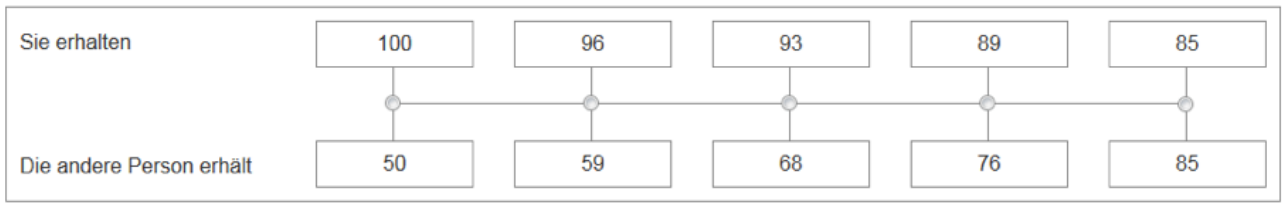












Implementation in TREE

- Incentives: Payoff to self and random other in CHF according to one of the decisions by every 20th respondent.
- Representative sample of Swiss school leavers in 2016. First SVO measurement two years later (panel wave 2 in 2018; average age 17); second SVO measurement in wave 6 in 2022 (average age 21).
- Only a random subsample of respondents received the SVO instrument. Furthermore, the SVO instrument was only administered to respondents who participated in the complementary online interview (the main TREE interview is conducted by CATI; respondents then receive an invitation for the complementary interview).
- Sample sizes
  - N = 2618 for the first SVO measurement
  - N = 1506 for the second SVO measurement

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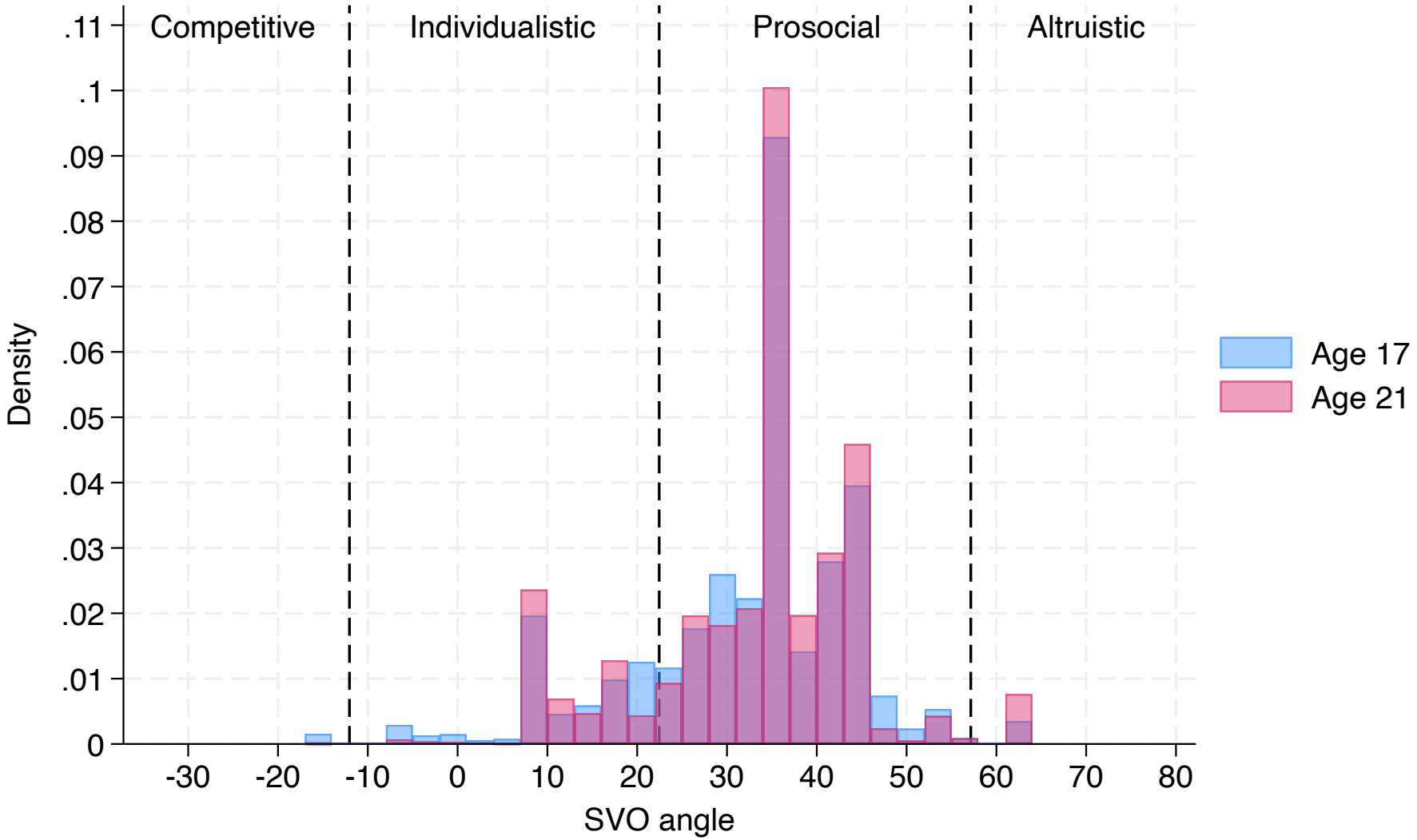
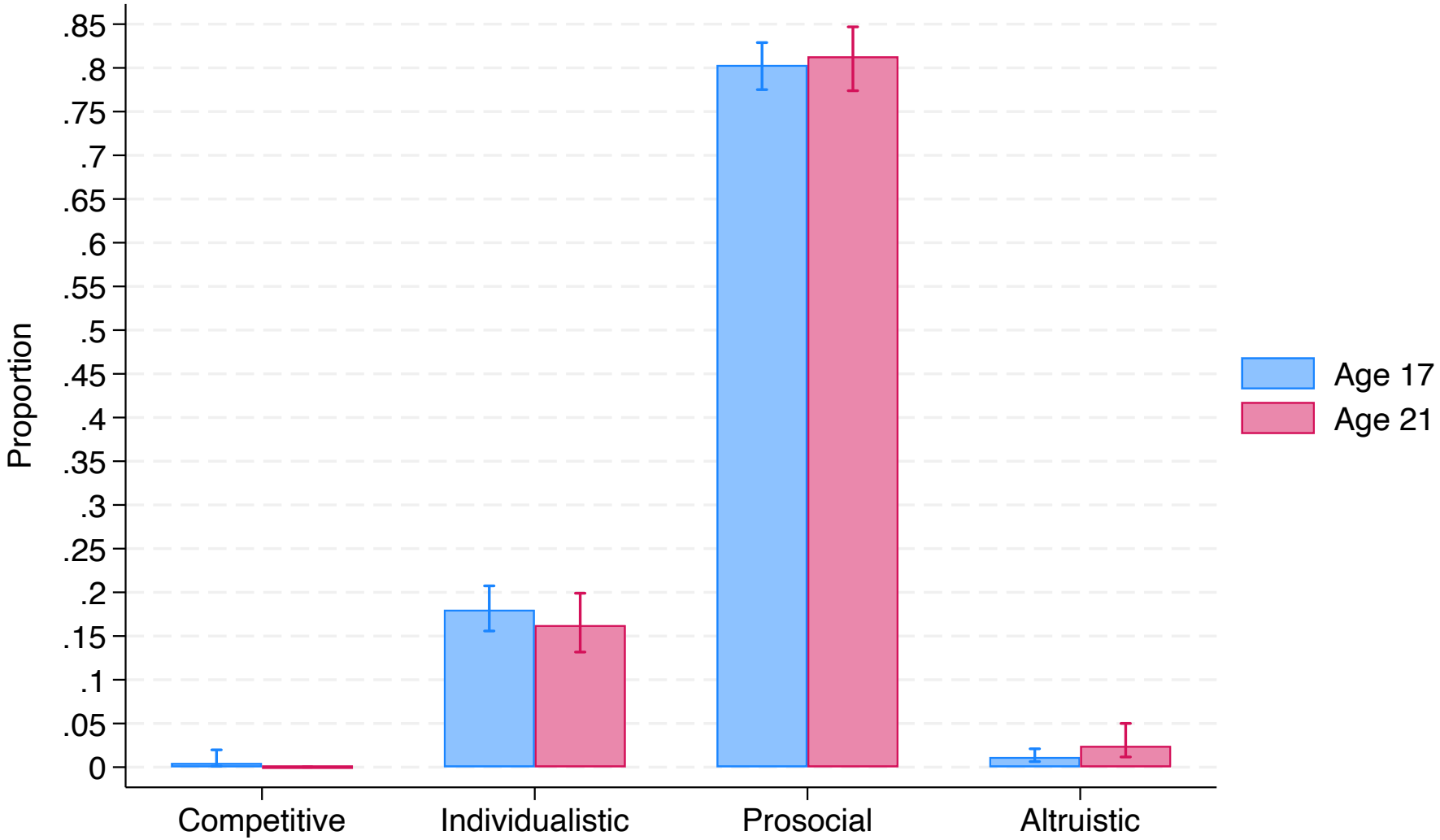
Distribution of SVO angles



Most respondents have SVO angles that are in the "prosocial" range. Compared to existing lab experiments and studies based on convenience samples, the proportion of respondents in the "pro self" range (individualistic, competitive) is very low.

Distribution of SVO types



There is a slight increase in prosocial+altruistic types over age, but the difference is only small: +2.2 (p = 0.250) percentage points in the full sample, +3.5 percentage points (p = 0.107) in the restricted sample of respondents with SVO measurement at both time points.

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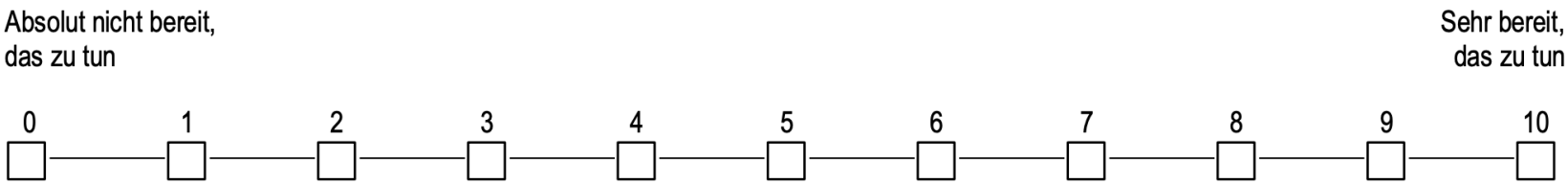
Comparison to single-item altruism scale

- Single item altruism scale (fielded in panel wave 1 in 2017)

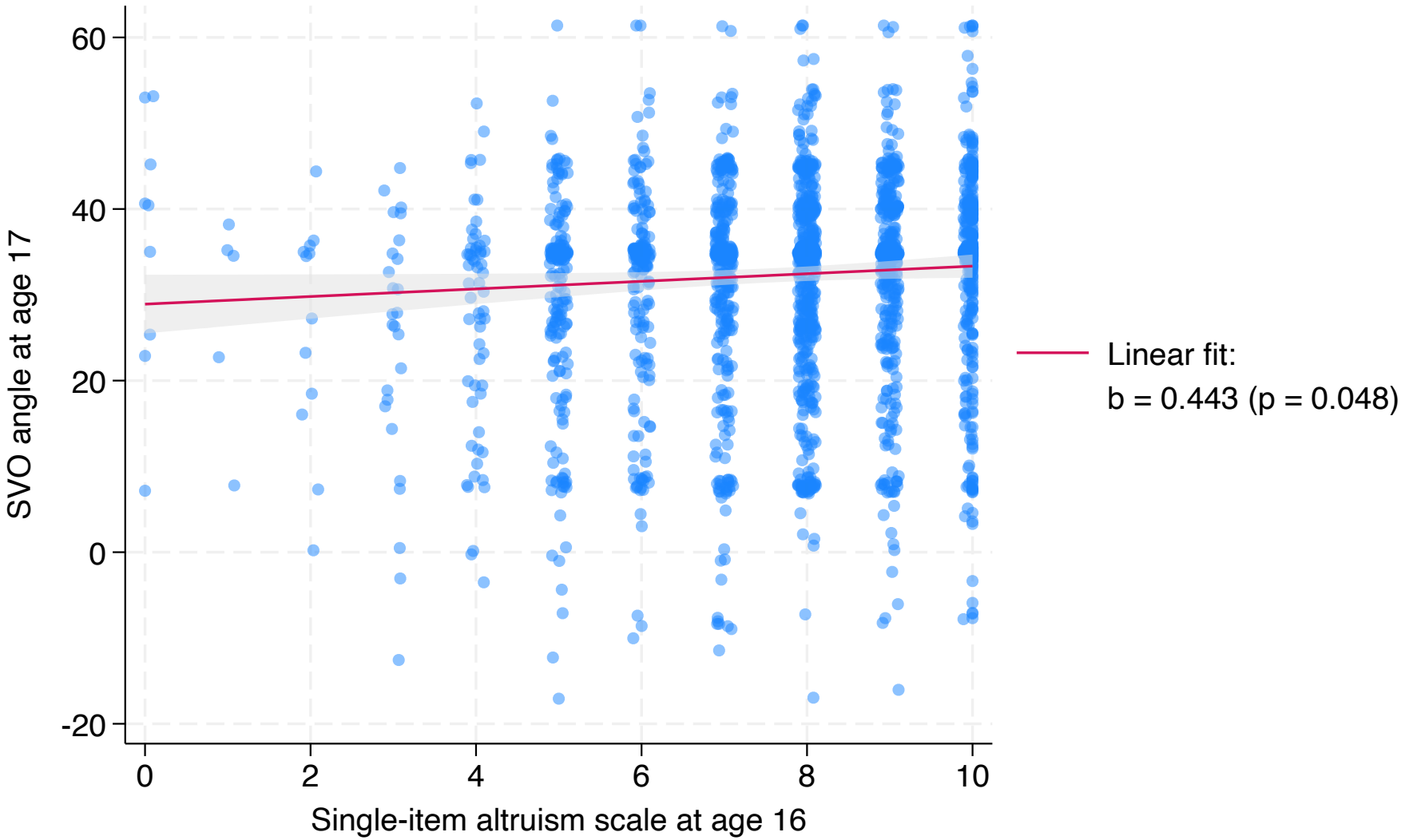
Sind Sie jemand, der im Allgemeinen bereit ist, mit anderen zu teilen, ohne dafür eine Gegenleistung zu erwarten, oder sind Sie dazu nicht bereit?

(Bitte wählen Sie eine Zahl zwischen 0 und 10 aus. Der Wert 0 bedeutet "Absolut nicht bereit, das zu tun", der Wert 10 "Sehr bereit das zu tun". Mit den Werten dazwischen können Sie Ihre Einschätzung abstufen.)



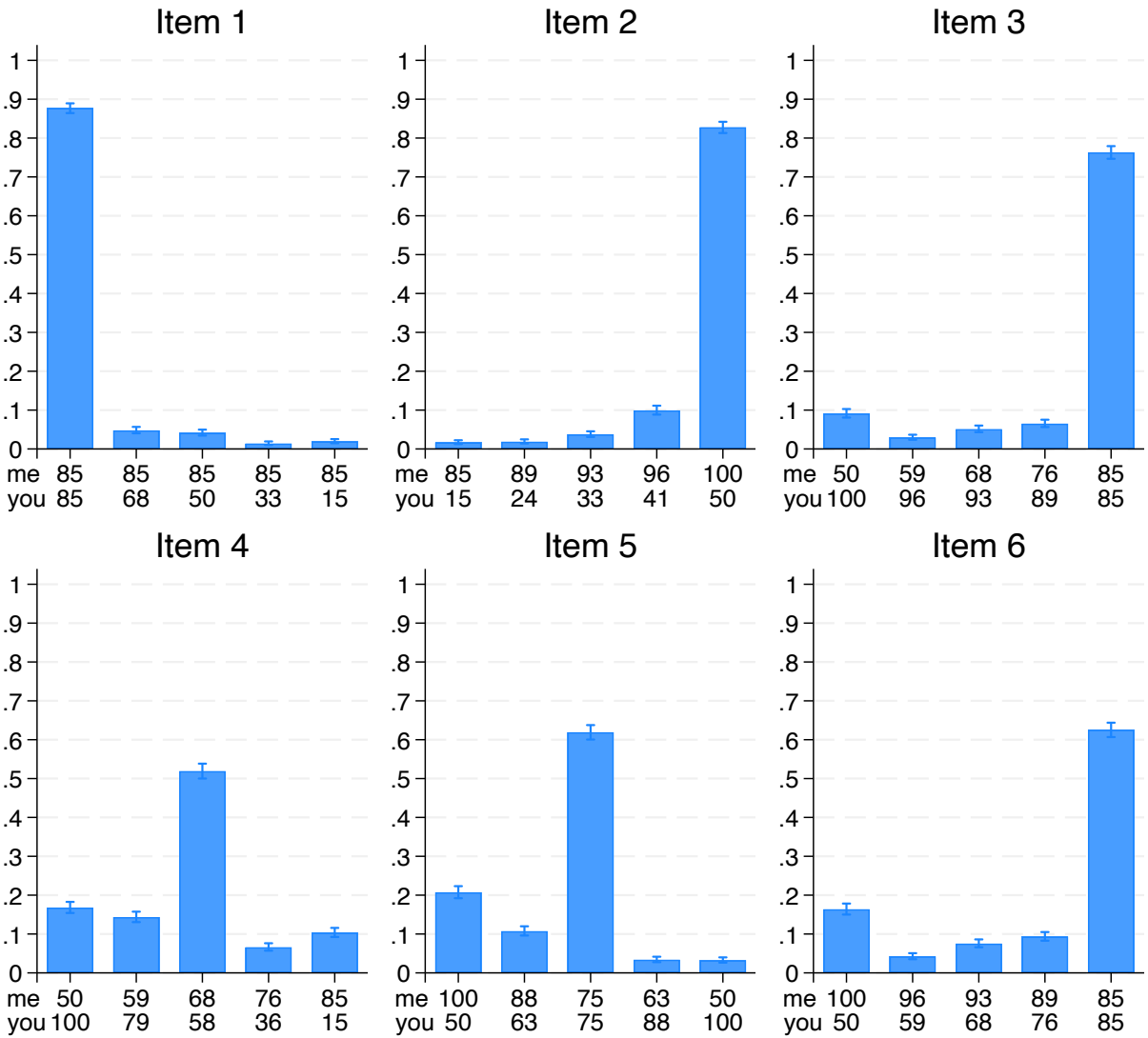
- A strong correlation between SVO angle and the altruism scale would indicate that the two approaches measure similar things.

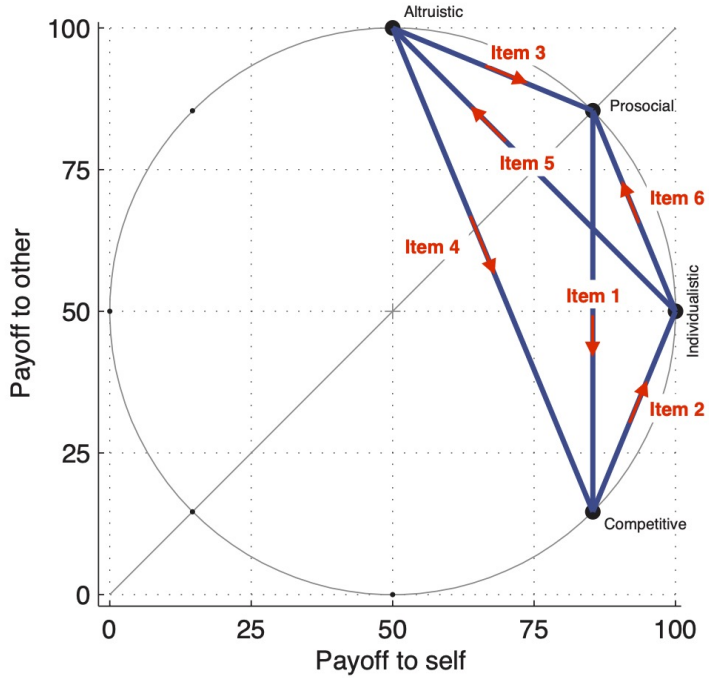
Comparison to single-item altruism scale



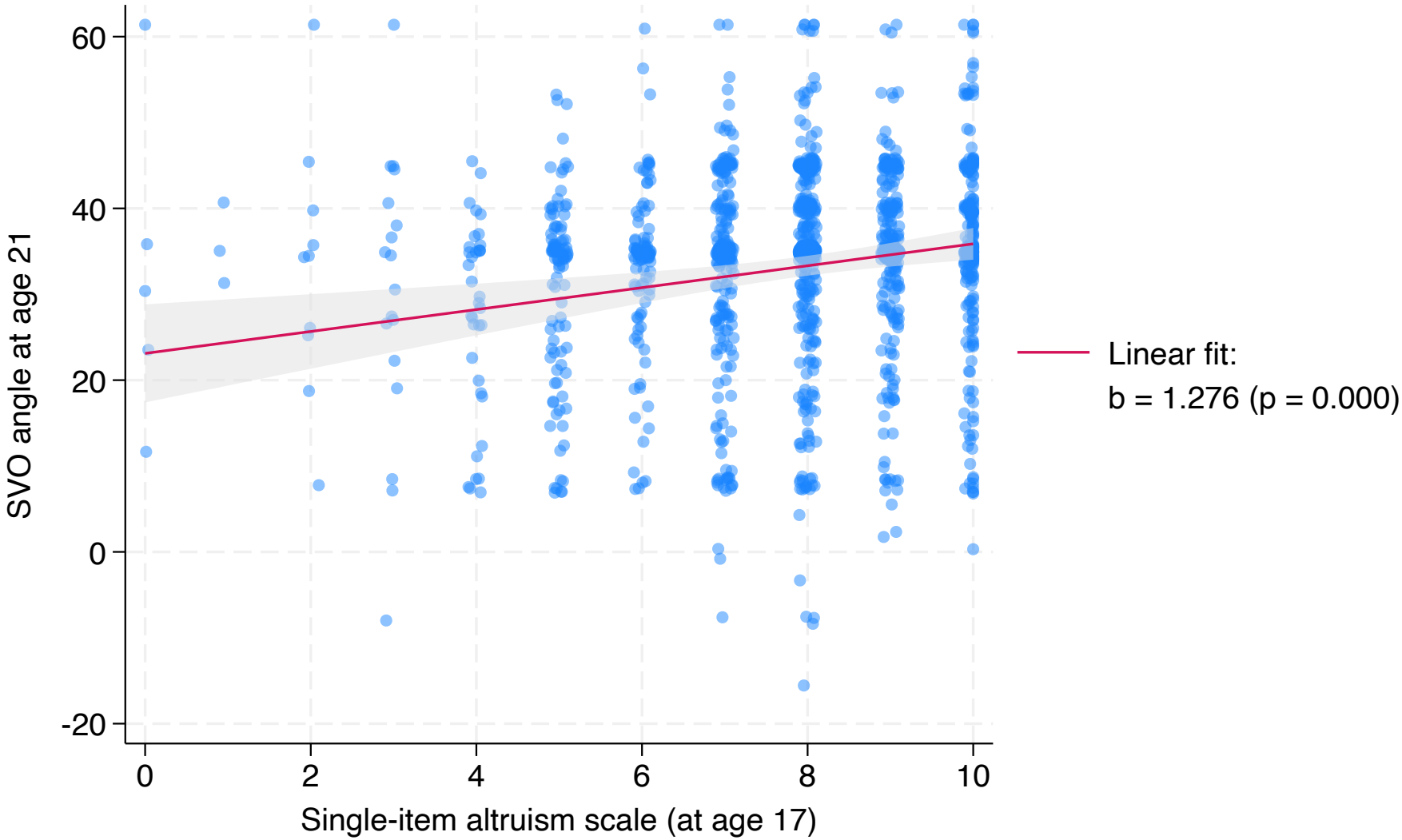
The relation is surprisingly weak, almost inexistent!

Distributions of SVO items at age 17





Relation between altruism scale and SVO at age 21



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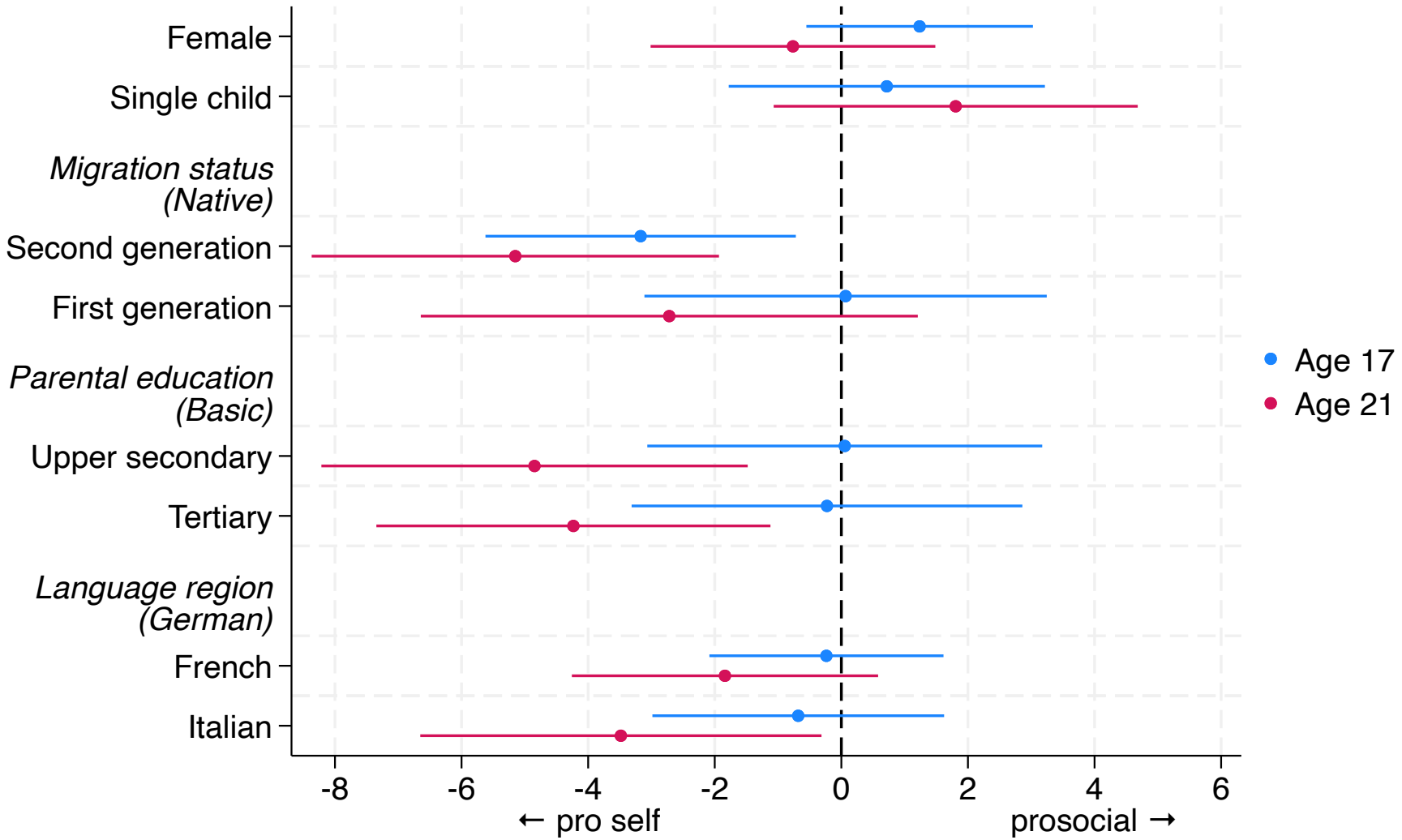
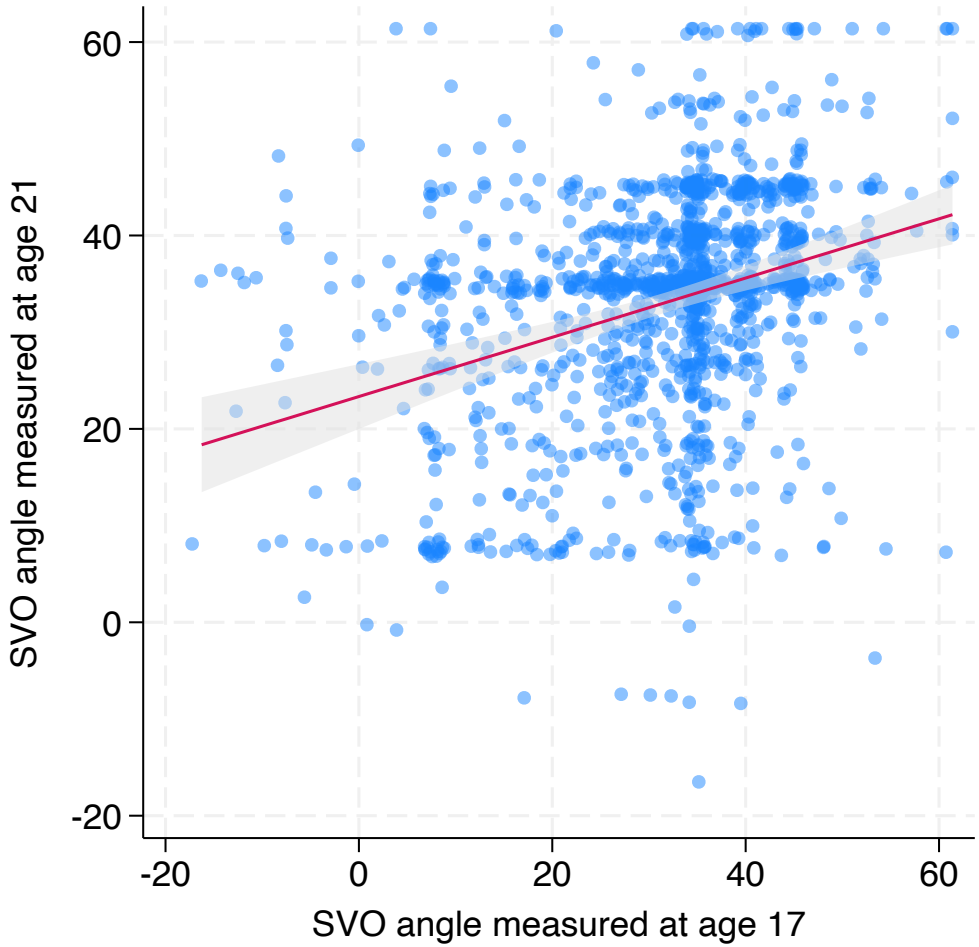
SVO and socio-demographic background



Stability of SVO measurement over time

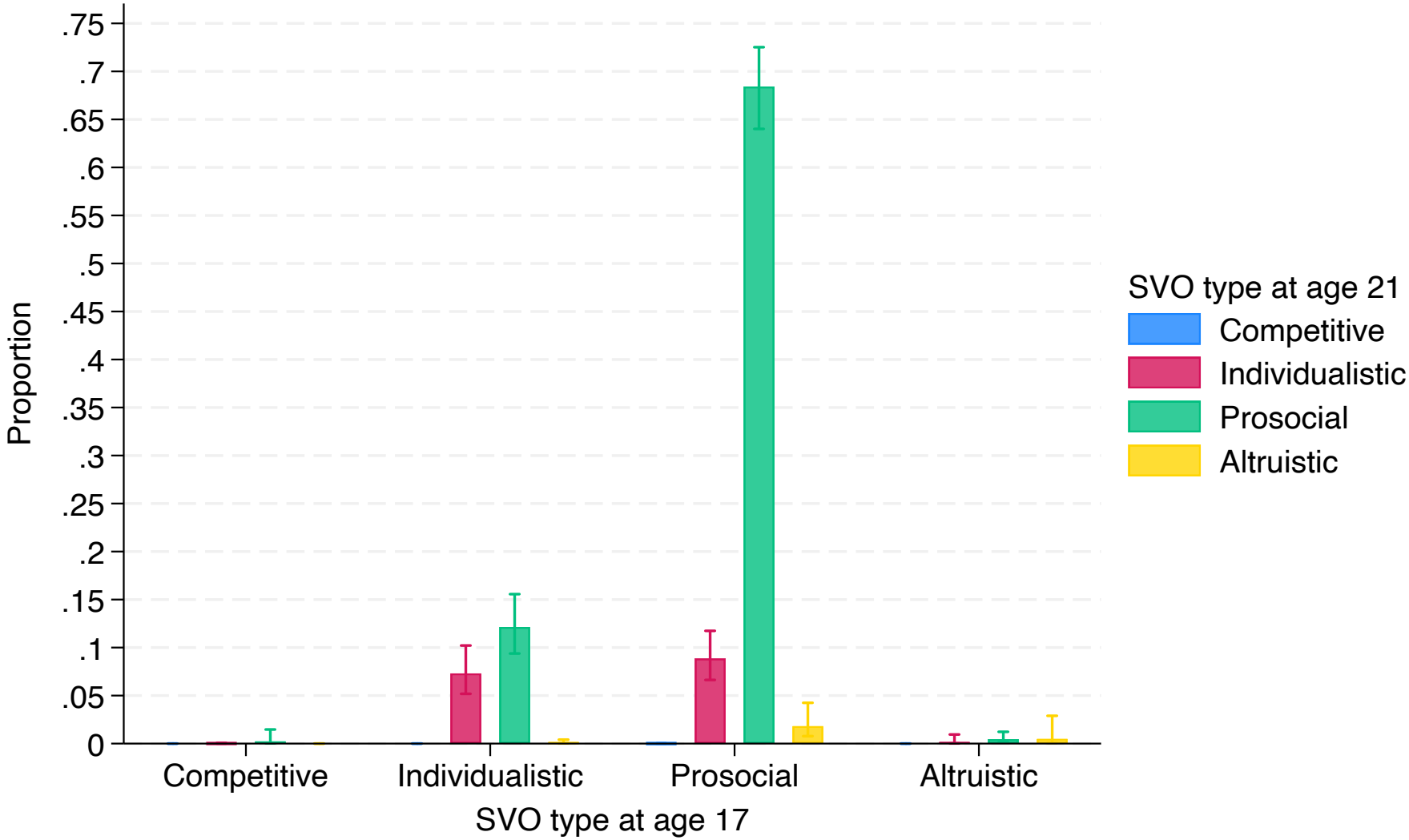
- There is a clear relation between the measurements at the two time points, but the relation is not very strong.



Linear fit: b = 0.306 (p = 0.000)
Correlation: r = 0.321

Stability of SVO measurement over time

- In terms of SVO types, there is an agreement of 76.2 percent between the two time points.



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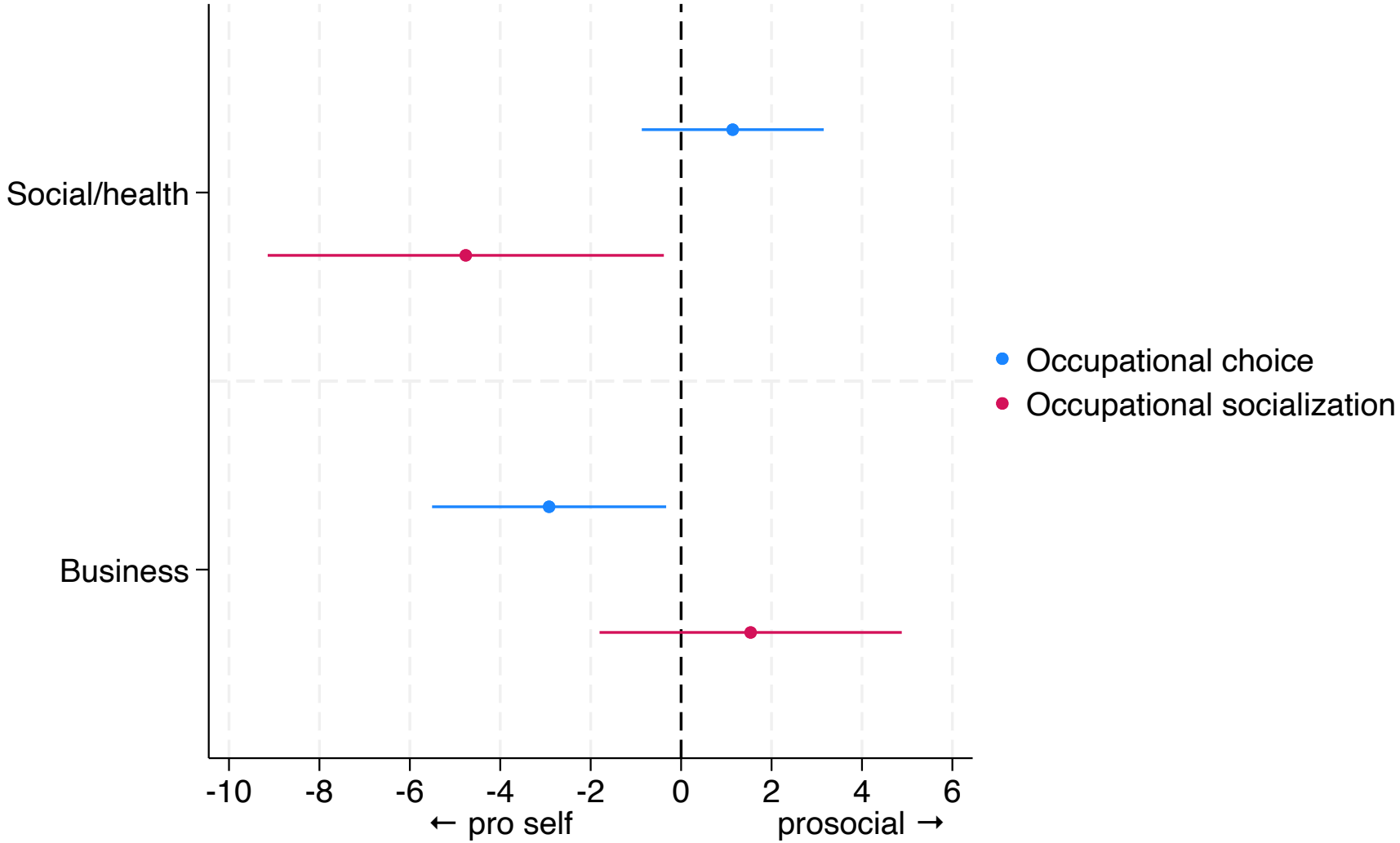
Social preferences and vocational choice vs. socialization

- Two mechanisms:
  1. Social value orientation may affect choice of training occupation/field of study.
  2. Training occupation/field of study may affect social value orientation.
- We classify the chosen upper secondary education at age 17 (VET or general education) into "social/health", "business", and "other".
- Hypotheses are:
  1. Respondents with prosocial orientation are more likely to chose upper secondary education in the "social/health" field; respondents with pro-self orientation are more likely to chose the "business" field.
  2. Obtaining training/education in "social/health" makes respondents more prosocial; obtaining training/education in "business" makes respondents less prosocial.

Social preferences and vocational choice vs. socialization



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Conclusions

- Successful implementation of (a simplified variant of) the SVO instrument in a representative survey among adolescents.
- The fact that there is strong heaping on reasonable points for each of the items is reassuring (respondents seemed to be able to handle the task).
- However, test-retest reliability appears rather poor. Furthermore, very low correlation with altruism scale.
- Higher proportion of prosocial types than in existing studies based on convenience samples (and also compared to the general-population survey by Ehlert et al. 2021).
- Some preliminary evidence for a relation between social preferences and educational choice.
- No support for the socialization hypothesis (at least not in the expected direction).

Literature

- Ehlert, A., R. Böhm, J. Fleiß, H. Rauhut, R. Rybnicek, Fabian Winter. 2021. The Development of Prosociality: Evidence for a Negative Association between Age and Prosocial Value Orientation from a Representative Sample in Austria. *Games* 12: 67. DOI: 10.3390/g12030067
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- Murphy, R.O., K.A. Ackermann, M.J.J. Handgraaf. 2011. Measuring Social Value Orientation. *Judgment and Decision Making* 6: 771–781.