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**z-proso Handbook: Instruments and Procedures in the Adolescent and Young Adult  
Surveys (Age 11 to 24; Waves K4-K8). Short Version**

z-proso Project Team

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Jacobs Center for Productive Youth Development

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## **z-proso Handbook:**

**Instruments and Procedures in the Adolescent and Young Adult  
Surveys (Age 11 to 20; Waves K4-K8)**

### **Short Version**

Zurich Project for the Social Development from Childhood to Adulthood (z-proso)

**Description of the settings, procedures, and instruments implemented in z-proso  
(short version)**

Version 1, last edited: March 2024

z-proso Project Team



## **IMPRESSUM**

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# 1 Introduction

The Zurich Project on the Social Development from Childhood into Adulthood (z-proso) comprises data from different sources. The current document describes the information collected during the five surveys carried out among the study participants at ages 11 to 20 (waves K4-K8, 2009 to 2018). Three prior surveys, which were done at ages 7 to 9 (waves K1-K3, 2005 until 2006), are described in a separate document as they differed markedly in both method and content from the later ones described here.

The structure of this report is as follows. Section 2 presents an overview of the settings and procedures of the adolescent and young adult surveys. Section 3 provides a list of the questionnaire themes by age of the participants and wave of data collection for those who would like an overview by specific age or wave. Section 4 lists the same information but this time in one table for those who would like a succinct overview of which themes were covered at what age and data collection. Sections 5 through 19 provide a detailed overview of each instrument, including both general information (e.g., description, source, derived constructs, and key publications). This short version does not include any items.



## 2 Settings and Procedures

The following table provides an overview on the settings and the procedures of the adolescent and young adult surveys, waves K4-K8. Note: The referenced documents (PDF files) are available in German on reasonable request.

<b>Questionnaire Language</b>	German ( <i>all waves</i> )
<b>Respondents Eligibility Recruitment</b>	<p>The target population of the z-proso study includes all first graders who entered public school in the city of Zurich in the school year of 2004/5 (2,514 children in 90 schools). From this target population, the initial target sample of 1,675 first graders in 56 schools was drawn (see <a href="#">Ribeaud et al. 2022</a> for the sampling procedure). The participants of all z-proso child (K1-K3, at age 7-9), adolescent (K4-K7, at age 11-17), and young adult surveys (K8, at age 20) are part of this target population.</p>
	<p><b>K4</b></p> <p>At K4, only parents who provided IC (Informed Consent) in the first phase of the study (parent surveys P1-P3; child surveys K1-K3) were asked to give IC again, which resulted in decreased participation rates. Besides that, teachers received an information letter in advance. Prior to K4, the Department of Education of the Canton of Zurich provided data on individual class and school division. This made it possible to find z-proso participants in non-z-proso classes.</p>
	<p><b>K5-K7</b></p> <p>At K5 all participants from the initial target sample were directly approached via the school and could provide IC themselves, with an opt-out option for parents. This resulted in substantially re-increased participation rates. Details on the IC procedure are provided further below.</p> <p>At K6, only those who had participated in at least one of the first five surveys were contacted. At K7, those were contacted who had participated in at least one of the last two waves (K5 and/or K6).</p> <p>As with K4, the Department of Education of the Canton of Zurich provided data on individual class and school division to find participants in different classes.</p> <p>In all three waves, participants received a written invitation to register by post or text message. At K5 and K6, study staff visited those who did not actively register at school and tried to motivate them in a brief personal conversation. As for wave 7, youths who had not registered for a survey appointment were contacted in person or by telephone:</p> <ul style="list-style-type: none"> <li>▪ In person: Youths who attended an upper secondary school or a preparatory vocational bridge year course (“10th school year”) (with at least several z-proso participants) were contacted via their teacher and took part in person at their school.</li> <li>▪ Youths who attended a vocational school were contacted by telephone. Likewise, young people who attended an upper secondary school or a preparatory vocational bridge year course with only a few z-proso participants or attended no school at all were contacted by telephone. Phone calls were made by the survey staff in the late afternoon and evening from the Decision Science Laboratory (DeSciL) at the ETH Zurich <sup>1</sup>.</li> </ul> <p>Materials used in the contacting process (invitation letters, contact lists etc.) are referenced in the recruitment manuals (see PDF files “K5_Handbuch_Teil1”, “K6_Handbuch_Teil1”, “K7_Handbuch_Teil1”).</p>
	<p><b>K8</b></p> <p>As with K7, participants were recruited among those who participated at K5 and/or K6. If no valid contact details of the participants or their contact person were available, attempts were made to contact them via their school or employer/apprenticeship company (School management was informed in advance). Social media was used as another option for finding and recruiting z-proso participants. If only a valid residential address was known, home visits were made for recruitment (as last recruitment option). Before the survey, participants received a pre-announcement letter and an invitation letter. There was also information for participants on a website (this page is no longer accessible).</p> <p>Prior to K8, a dashboard was implemented as a fieldwork management tool. This graphical user interface served visualisation and editing purposes of the z-proso contact database. It was mainly used for recruitment during K8 as calls via landline and sending messages were possible based on the contact database. When K8 was completed, it</p>

<sup>1</sup> ETH Zurich stands for «Swiss Federal Institute of Technology in Zurich», in German «Eidgenössische Technische Hochschule Zürich», in the following only „ETH”.

		could still be used mainly for address updating purposes. Four mobile phones were also used for recruitment at K8. Recruiters received a cash bonus for agreed appointments.  In addition, reminders for registration were regularly sent by text message and e-mail. Materials used in the contacting process (invitation letters, contact lists etc.) are referenced in the recruitment manual (see PDF file "K8_Handbuch_Teil1").				
<b>Survey Dates Age Grade</b>	<b>Survey Dates K4-K8</b>	In K4, the surveys were conducted in schools between Christmas and spring holidays 2009. Individual interviews took place at home afterwards until April 2009. The fifth survey was conducted mainly between the spring and summer holidays 2011. The sixth and seventh survey took place mainly between the city of Zurich's sports and spring holidays. The eighth wave was scheduled mainly around spring holidays from mid-April to mid-Mai 2018.				
	<b>Wave</b>	<b>Median Date</b>	<b>Start Date</b>	<b>End Date</b>	<b>Mean Age (Years)</b>	<b>Typical School Grade (School Level)<sup>2</sup></b>
	K4	2009-02-02	2009-01-12	2009-04-20	11.3	5 (primary)
	K5	2011-06-21	2011-06-06	2011-09-10	13.7	7 (lower secondary, different performance levels)
	K6	2013-03-27	2013-03-11	2013-07-04	15.4	9 (lower secondary, different performance levels); last compulsory year
	K7	2015-03-28	2015-03-07	2015-08-11	17.4	11 (upper secondary, Vocational Education and Training (VET) and general education programmes)
	K8	2018-05-02	2018-04-17	2018-09-23	20.6	-
<b>Number of Completed Questionnaires (Survey Setting)</b>	K4: n=1,147 (school 3+ kids: 934, school 1-2 kids: 55, participants home: 156, unknown: 2) K5: n=1,365 (public school/survey centre: 1,149, ETH: 129, participants home: 61, other: 16, telephone: 10) K6: n=1,446 (public school/survey centre: 1,234, ETH: 146, participants home: 52, telephone: 14) K7: n=1,305 (public school/survey centre: 826, ETH: 385, participants home: 13, telephone: 81) K8: n=1,180 (DeSciL-lab: 976, Oerlikon campus of the University of Zurich: 167, online: 37)					
<b>Type of Assessment Settings Further Data Collections</b>	K4	<p>Paper-and-pencil survey in class at school:</p> <ul style="list-style-type: none"> <li>▪ 2-3 survey staff visited the children in their school classes (depending on class size, usually one interviewer per 5 children).</li> <li>▪ Surveys were conducted in the classroom during regular school lessons. Teachers were usually present but not allowed to walk through the classroom to ensure the anonymity of the participants.</li> <li>▪ The survey staff explained the procedure and introduced the questionnaire.</li> <li>▪ Participants received a printed questionnaire to be filled out anonymously. To this purpose desks were arranged in such a way that the questionnaires were not visible to other participants in the classroom.</li> <li>▪ To allow to link survey responses with those from previous data collections, each questionnaire was labelled (pseudonymized) with the participants' unique identification number.</li> <li>▪ The first scale ("Tom &amp; Tina"- Social Behaviour Questionnaire (SBQ)), the decision-making instrument as well as the most difficult parts of the questionnaires were introduced by the survey staff using a data projector. Otherwise, participants completed the questionnaires independently. For problems or questions, they could ask staff members individually.</li> </ul> <p>Further data collections:</p> <ul style="list-style-type: none"> <li>▪ Parent (P4) and teacher surveys (T4.2) were conducted in the same school year.</li> </ul>				
	K5-K7	<p>Paper-and-pencil survey at "survey centres" in schools:</p> <ul style="list-style-type: none"> <li>▪ At grade 7, wave K5, study participants moved to secondary school which is subdivided in three main attainment levels. Accordingly, study participants were</li> </ul>				

<sup>2</sup> This is a standard indication and not the actual grade level for all.

	<p>scattered across different classes and schools which prevented the research team to conduct the surveys in class settings during school lessons.</p> <ul style="list-style-type: none"> <li>▪ Instead, selected schools in the city of Zurich and in a few selected important municipalities were designated as so-called “survey centres” (SC). Surveys were carried out in group settings of typically 3 to 30 participants in classrooms of the SC (see below sessions). Up to 3 staff members met the participants and instructed them. Since the survey sessions were conducted outside regular school hours, participants received a participation compensation (see below participation compensation) and were reimbursed for their travel expenses.</li> <li>▪ Participants could choose among different survey dates and locations in their vicinity. The day before the survey, all participants of whom the staff had a mobile phone number received a reminder text message.</li> <li>▪ As with K4, participants received a printed questionnaire to be completed anonymously. To this purpose desks were arranged in such a way that the questionnaires were not visible to other participants in the classroom. In the sixth wave (K6), some socio-economic data were obtained retrospectively during the “informed consent conversation” for non-K5-participants.</li> <li>▪ To allow to link survey responses with those from previous data collections, each questionnaire was labelled (pseudonymized) with the participants’ unique identification number as in previous waves.</li> <li>▪ Study staff guided the participants through the questionnaire using a PowerPoint presentation, offered individual assistance, ensured a smooth completion process, and also cursory checked the questionnaires for consistency and completeness.</li> </ul> <p>Further data collections:</p> <ul style="list-style-type: none"> <li>▪ In the sixth and seventh wave (K6-K7), two resting heart rate measurements with oximeters (in the classroom where the survey was completed) and a measurement of biceps circumference (outside the survey room) took place. In addition, a so-called interviewer questionnaire was completed there, and entailed records of the pulse and biceps measurements, information on class division, the consent form, contact details (and a receipt for participation compensation).</li> <li>▪ Teacher surveys (T4.3 to T7.1/VT7.1) were realised before and after survey waves K5-K7. Parent surveys were no longer continued.</li> </ul> <p>Alternative settings:</p> <ul style="list-style-type: none"> <li>▪ Upon request, individual surveys were also conducted at premises of the ETH, at the young person's home or at another suitable location (especially for youths who lived outside the city, needed individual support, or found no suitable group appointment).</li> <li>▪ Telephone interviews were offered to participants living abroad and in emergency cases. Only the instructions were given by telephone whereas the participants completed the questionnaires independently. To that purpose, participants received, by post, a questionnaire copy, a consent form (in K6 only for non-K5-participants), an addressed return envelope and a letter confirming the appointment for the telephone interview (with the note that the questionnaire should not be completed independently beforehand).</li> </ul>
K8	<p>Computer-aided self-administered lab-based survey (CASI):</p> <ul style="list-style-type: none"> <li>▪ The survey premises were at the Decision Science Laboratory (DeSciL) at the ETH. If an appointment had been booked (usually via an online booking platform), an automatic appointment reminder was sent by e-mail two days before and per text message 24 hours before the survey. Participation was compensated for and travel expenses were reimbursed (for public transport, season ticket excluded). The survey was designed as a trail with four to five stations: <ul style="list-style-type: none"> <li>▪ Station 1: Check-in (ID-check, handing out information material, brief instructions)</li> <li>▪ Station 2: Completion of the main questionnaire at a computer workstation in one of 36 cubicles. Before starting the survey, participants read through the consent form.</li> <li>▪ Station 3: Informed consent and check that contact details are up to date. Participants had the opportunity to ask questions, make reservations, and gave their consent to be invited to add-on partner studies.</li> <li>▪ Station 4 (optional): Add-on “hair study” (hair sample collection and hair-related questionnaire)</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>▪ Station 5: Check-out (collecting documents, paying out the participation compensations, de-briefing)</li> </ul> <p>Further data collections:</p> <ul style="list-style-type: none"> <li>▪ For the first time, add-on partner studies were implemented. One add-on, a hair sampling study aimed at analysing metabolites of different substances, was conducted just after completion of the main questionnaire and the informed consent procedure, on the premises of the DeSciL (study directed by Prof. B. Quednow/ Prof. L. Shanahan). Moreover, the participants were invited in up to two further add-on studies: All participants were invited to the “Decades-to-Minutes” (D2M) experience sampling study directed by Dr A. Murray which was carried out in fall 2018. Moreover, a sub-sample of 500 was invited to the “Zürcher Untersuchung zu Gehirn und Immungenen” (z-GIG) study. Selection was based on patterns of peer violence in previous z-proso surveys. z-GIG consists of an immune genes study based on blood analyses directed by Prof. M. Shanahan, and an fMRI study on brain functioning directed by Prof. T. Hare.</li> <li>▪ A series of decision games was embedded at the end of the main questionnaire (direction: Prof. H. Rauhut).</li> <li>▪ During questionnaire completion, two oximeter resting heart rate measurements were carried out, followed by a biceps measurement in a separate room. The data of the physical measurements was documented on paper.</li> <li>▪ Additional data collections included a criminal justice data collection and a COVID-19 survey series (both z-proso team). Consent for a full search of youth criminal record data was obtained at K7. Information was collected on all offences known to the police and related criminal proceedings in which they were mentioned either as an injured party (victim) or as a perpetrator. The COVID-19 survey series comprised four online surveys among K8-participants on the perception of the crisis among study participants in 2020. In contrast to previous survey waves, there were no more parent or teacher surveys carried out in parallel.</li> </ul> <p>Alternative Settings:</p> <ul style="list-style-type: none"> <li>▪ In addition to the main setting on the DeSciL premises, individual interviews were conducted on the premises of the Oerlikon campus of the University of Zurich to better reach participants in the Zurich North area.</li> <li>▪ Those who could not attend in person could complete the questionnaire online with instructions by Skype/phone from study staff (as last option or if they resided abroad).</li> </ul>
Preparatory Work	K4	<ul style="list-style-type: none"> <li>▪ For K4 a completely new paper questionnaire was developed, because paper-and-pencil surveys were introduced instead of face-to-face interviews. First, classroom- based paper-and-pencil surveys were considered to increase participation rates and to minimise socially desirable answer patterns. Second, this allowed lowering the overall costs of the survey considerably. A preliminary version was tested in six classes outside the city of Zurich in July 2008. Besides that, a revised version was tested in another six classes in November 2008. The final questionnaire was designed based on these comprehensive pretests.</li> <li>▪ The survey staff was trained in two (half-day) sessions, one on recruitment, the other on organising and conducting survey sessions prior to the survey. They also received a general introduction into the study on this training day. In addition, a manual describing the recruitment and survey procedure was compiled for the fieldwork staff (see PDF file “K4_Handbuch”).</li> <li>▪ One staff member per team was responsible for coordinating with the teacher. This coordination involved calling the teacher at least one week before the interview to discuss the following issues: Confirmation of date, place and time of interview, briefly describe process, discuss silent tasks, check the participant list, check parental consents and ask about additional support needs.</li> <li>▪ Before the interview, it was essential to meet the teacher, set up the room and provide the material.</li> </ul>
	K5-K7	<ul style="list-style-type: none"> <li>▪ The many new scales and scale extensions introduced at the fifth wave (K5) were tested in a pilot study. To this purpose, a sample of 200 young people between the ages of 13 and 14, independent of the initial sample from 2004, was randomly selected in the city of Zurich.</li> <li>▪ Training sessions for the survey staff on recruitment and on organising and conducting survey sessions took place prior to the survey with a general introduction part to the study. In addition, two manuals were elaborated for the</li> </ul>



		<p>fieldwork staff, one for the recruitment process, the other on preparing and conducting survey sessions (see PDF files “K5_Handbuch_Teil1-2”, “K6_Handbuch_Teil1-2”, “K7_Handbuch_Teil1-2”).</p> <ul style="list-style-type: none"> <li>▪ For each school, a contact person (caretaker, school director, teacher) for the survey room was specified by the study coordination. One week before the survey date, the survey staff member in charge called the contact person for the room and clarified whether the room was definitely available, who would open it and whether there were any special points to note.</li> <li>▪ One staff member per team was responsible to ensure that all the necessary documents were available for the interview.</li> </ul>
	K8	<ul style="list-style-type: none"> <li>▪ As in previous waves, the study staff participated in two training sessions. In addition, two manuals were prepared for the fieldwork staff (recruitment and survey implementation, see PDF file “K8_Handbuch_Teil1-2”).</li> <li>▪ Before the appointments, the stations and the survey documents – and in particular the personalised consent forms – had to be prepared at the DeSciL laboratory (see also below materials and manuals mentioned above).</li> </ul>
<b>Materials</b>	K4	<p>Study staff received various materials in advance to prepare for their visit at the schools. These materials are comprehensively listed in the manual (see PDF file “K4_Handbuch”). The following materials were essential for the survey sessions in classes:</p> <ul style="list-style-type: none"> <li>▪ Laptop with presentation slides, beamer, and accessories per survey team</li> <li>▪ Contact sheet for the child survey (time of survey, address of school, teacher, telephone number of school, room details etc.)</li> <li>▪ Participant lists for each participating class</li> <li>▪ Set of 21-page questionnaire, pseudonymized by means of individual ID number</li> </ul>
	K5	<p>The following materials were essential for the survey:</p> <ul style="list-style-type: none"> <li>▪ Laptop with presentation slides, beamer, and accessories per survey team</li> <li>▪ Consent form for each participant</li> <li>▪ Questionnaire with 33 pages for each participant (version for girls and boys)</li> <li>▪ An overview with contact details for counselling and support services</li> <li>▪ Copies with catch-all work (puzzles, sudoku) for those who finish earlier</li> <li>▪ Compensation in cash and receipt form for each participant</li> </ul> <p>See the manual for a list of all materials for the survey staff (see PDF file “K5_Handbuch_Teil2”).</p>
	K6	<p>The following materials were required for the survey:</p> <ul style="list-style-type: none"> <li>▪ Laptop with presentation slides, beamer, and accessories per survey team</li> <li>▪ Consent form for non-K5-participants</li> <li>▪ Questionnaire with 33 pages for each participant (version for girls and boys)</li> <li>▪ Individualised interviewer questionnaires for each participant, for non-K5-participants with an additional socioeconomic part (incl. receipt form, version with/without consent form)</li> <li>▪ An overview with contact details for counselling and support services</li> <li>▪ Copies with catch-all work (puzzles, sudoku, etc.) for those who finish earlier</li> <li>▪ Compensation in cash and receipt form for each participant</li> <li>▪ 2-3 pulse meters (oximeters), 1 bottle of cleaning petrol</li> <li>▪ 2 measuring tapes (for biceps measurement)</li> </ul> <p>See the manual for a list of all materials (see PDF file “K6_Handbuch_Teil2”).</p>
	K7	<p>The following materials were required for the survey:</p> <ul style="list-style-type: none"> <li>▪ Laptop with presentation slides, beamer, and accessories per survey team</li> <li>▪ Questionnaire with 33 pages for each participant (version for girls and boys)</li> <li>▪ Individualised interviewer questionnaires for each participant (incl. receipt form, consent form)</li> <li>▪ Supply of blank questionnaires and interviewer questionnaires (not individualised)</li> <li>▪ An overview with contact details for counselling and support services</li> <li>▪ Copies with catch-all work (puzzles, sudoku, etc.) for those who finish earlier</li> <li>▪ Compensation in cash for each participant</li> <li>▪ 2-3 pulse meters (oximeters), 1 bottle of cleaning petrol</li> </ul>

		<ul style="list-style-type: none"> <li>▪ 2 measuring tapes (for biceps measurement)</li> <li>▪ Stickers with printed z-proso ID of the youths participating in the survey and the survey ID</li> </ul> <p>See the manual for a list of all materials (see PDF file “K7_Handbuch_Teil2”).</p>
	K8	<p>As there were several stations in a lab, different materials were needed (also for the hair study). The questionnaire was electronic, but the resting heart rate and biceps measurement data were still recorded on a paper document. Other paper documents were the informed consent, the receipt form, the actual contact details, and an overview of counselling and support services.</p> <p>More information can be taken from the checklists of the eighth survey wave (see PDF file “K8_Handbuch_Teil2”).</p>
<b>Appointments Sessions</b>		<p>While K4 was conducted in regular school lessons, the subsequent survey waves were organised outside regular school lessons. Survey dates were then mostly scheduled on afternoons after school, on later afternoons, after school hours or work, and on evenings and Saturdays.</p> <p>Below is a list of information about the group/individual sessions:</p>
	K4	One session usually covered all z-proso participants of a class.
	K5	There were up to 19 participants per group session and 103 individual appointments.
	K6	There was usually one staff member per up to 20 youths in group sessions. There were up to 27 participants per session and 75 individual appointments.
	K7	The group sessions typically included 2 to 30 people. The largest session comprised 37 participants and there were 145 individual appointments.
	K8	<p>A maximum of 9 people could attend a session at the DeSciL. Some of the sessions were overlapping.</p> <p>There were also 137 individual sessions on Oerlikon campus of the University of Zurich and 37 via skype.</p>
<b>Completion Time</b>	K4	The survey lasted two regular 45-minute school lessons. Participating children had to be given at least a 5-minute break between the two parts of the questionnaire or until the next school lesson. If there was not enough time, the staff made sure that at least the questionnaire sections on the “mobile phone” vignette and on the “chewing gum” vignette as well as on delinquency in the second part of the questionnaire were completed.
	K5	A maximum of two hours was reserved for the survey, including one 5-minute break. If some participants needed significantly more time to complete the questionnaire, the other participants were allowed to leave the school accompanied by a member of the survey team. The former received an additional compensation of CHF 5 (max. CHF 10 if it took more than half an hour) as an additional motivation to complete the questionnaire.
	K6	As at K5, a maximum of two hours was reserved for the survey, including one 5-minute break. For participants who needed more time to complete the questionnaire, the procedure was the same.
	K7	One and a half hours were reserved for the survey, including one 5-minute break. For participants who needed more time to complete the questionnaire, the procedure was the same as for K5 and K6.
	K8	The total processing time in the DeSciL-lab was estimated to about one and a half to two hours for the whole procedure. The median processing time only for the questionnaire was 69.3 minutes.
<b>Informed Consent</b>		<p>A written consent is necessary to authorise the z-proso study management to do the following:</p> <ul style="list-style-type: none"> <li>▪ To keep and update contact data incl. contact person from K5 onwards</li> <li>▪ To collect and store data</li> <li>▪ To link data from different survey waves</li> </ul> <p>In contrast, the study management is committed to:</p> <ul style="list-style-type: none"> <li>▪ Strictly separate contact data from research data</li> <li>▪ Pseudonymisation</li> <li>▪ Anonymised data analysis</li> </ul> <p>From wave 5 onwards, youths provided written informed consent on the premises of the survey and had the opportunity to ask questions and express specific reservations in a face-to-face conversation with study staff.</p>
	K4	Parental consent was renewed after completion of the first project phase (wave 1 to 3, 2004-2007). Only phase 1 participants were reapproached for phase 2 participation.

		<p>→ Parental informed consent 2, obtained in 2008 prior to the fourth parent interview, for parental, child, and teacher survey participation (see PDF file "IC_parent2").</p> <p>For those children whose primary caregiver did not actively participate in the study, it was necessary to check whether the parental consent had been returned.</p>
	K5	<p>From wave 5 onwards, participating youths provided active informed consent whereas parents could refuse the participation of their children (passive consent). Parents were informed by letter on the study. If they refused to invite their child to participate, they had to contact the administration office. If they did not object, teachers were allowed to be surveyed about them and their class.</p> <p>All 1,675 pupils of the initial target sample were recontacted, regardless of participation in earlier data collections.</p> <p>→ Young person consent 1, provided prior to the K5 survey, i.e., also for wave 6. Valid only in absence of a parental refusal (see PDF file "IC_young_person1").</p>
	K6	<p>Since the informed consent provided at wave 5 was also valid for wave 6, informed consent at K6 was only obtained from those who did not participate at K5. At K6 parents were again informed on the study and given the opportunity to refuse their child's participation. The consent included a biceps and resting heart rate measurement and their agreement to allow their teacher to complete a short questionnaire about them and their school.</p> <p>→ Young person consent 1 (wave 5 and 6) (combined with passive parental consent; see PDF file "IC_young_person1").</p>
	K7	<p>Only participants who had participated in K5/K6 were re-contacted for K7 participation. There was no longer any parental informed consent. As in previous waves, consent for a biceps and resting heart rate measurement and a further teacher survey (if applicable, additionally for their vocational trainer) was obtained. A new feature was a consent on criminal justice data from the youth prosecution authorities ("Oberjugendanwaltschaft").</p> <p>In the seventh survey wave, the consent form was renewed:</p> <p>→ Young person consent 2 (wave 7, see PDF file "IC_young_person2").</p>
	K8	<p>Participants were asked which add-ons they would like to be invited to. In addition, consent for further data collection was obtained:</p> <ul style="list-style-type: none"> <li>▪ For decision making games in follow-up to the z-proso questionnaire</li> <li>▪ Biceps and resting heart rate measurement</li> <li>▪ Data from the Department of Education of the Canton of Zurich on attended educational institutions and types of education</li> <li>▪ Using their address data for study purposes</li> <li>▪ Criminal justice data collection from the criminal justice authorities Zurich</li> </ul> <p>In the eighth survey wave, the consent form was renewed:</p> <p>→ Young person consent 3 (wave 8, see PDF file "IC_young_person3").</p>
<b>Participation Compensation</b>	K4	<p>Since the survey was conducted during school lessons, there was no financial compensation. As a thank you for their participation, each child received a coloured bag at the end of the survey.</p>
	K5-K8	<p>Since the surveys took place in the free time, it was inevitable to compensate the youths for their participation. For this purpose, they received a participation compensation:</p> <p>K5: CHF 30 in cash on receipt  K6: CHF 50 in cash on receipt  K7: CHF 60 in cash on receipt  K8: CHF 75 in cash on receipt + CHF 30 for hair study</p>
<b>Data Entry</b>	K4-K7	<p>The questionnaire data were entered manually by trained staff with the <i>EpiData Entry 3.1</i> software. The data were further processed with the statistical software <i>SPSS</i>.</p>
	K8	<p>In wave 8 the data were collected electronically. The cloud service of the <i>Qualtrics</i> company was used for the data collection. The data were processed with the statistical software <i>SPSS</i>. Prior to the survey, an external expert opinion was obtained stating that in this setting there were no concerns about changing the survey method from a written to an online survey.</p>

Note: The referenced documents (PDF files) are available in German on reasonable request.



### 3 Questionnaire Themes for each Age/Wave

The tables in sections 3.1 through 3.5 list the questionnaire themes separately for each data collection wave and age of the participants. The overall themes are listed in **bold** and grey scale. The sub-themes are listed below the overall themes.

#### 3.1 Age 11 (K4)

<b>Questionnaire Themes K4</b>
<b>Sociodemographics</b>
Demographic and socio-demographic information
Financial resources
<b>Parent-Child Relationship</b>
Parenting (Alabama Parenting Questionnaire)
<b>School</b>
School experiences
Time spent on homework
<b>Leisure Activities / Media Use</b>
Leisure activities
Media use
Bedtime
<b>Social Behaviour / Social Problem-Solving</b>
Social behaviour (Social Behaviour Questionnaire)
Conflict coping
Social desirability
<b>Delinquency, Substance Use, and Contact with the Police</b>
Delinquency and related police contacts
Contact with the police as an offender
Situational characteristics of assault
<b>Attitudes toward Crime and Violence</b>
Decision making
Moral neutralization of violence
<b>Peers / Friends / Romantic Partners</b>
Best friends (incl. their problem behaviour)
<b>Victimisation</b>
Peer victimisation
Violent victimisation
<b>Personality</b>
Self-control

#### 3.2 Age 13 (K5)

<b>Questionnaire Themes K5</b>
<b>Sociodemographics</b>
Demographic and socio-demographic information
Financial resources
<b>Physical Development and Health</b>
Pubertal development
<b>Parent-Child Relationship</b>
Parenting (Alabama Parenting Questionnaire)
<b>School</b>
School experiences
Time spent on homework
School sanctions
<b>Life Events</b>
Life event calendar
<b>Leisure Activities / Media Use</b>
Leisure activities
Media use
Bedtime

<b>Social Behaviour / Social Problem-Solving</b>
Social behaviour (Social Behaviour Questionnaire)
Conflict coping
Social desirability
<b>Delinquency, Substance Use, and Contact with the Police</b>
Delinquency and related police contacts
Situational characteristics of assault
Substance use and related police contacts
Experiences with the police
<b>Legal Attitudes</b>
Legal cynicism
<b>Attitudes toward Crime and Violence</b>
Violence legitimising norms of masculinity
Moral judgment
Decision making
Moral neutralization of violence
Shame and guilt
<b>Support / View of the Self / Resiliency</b>
Social support by peers and adults
Professional counseling, support, and medication
Generalised trust
Perceived social exclusion
<b>Peers / Friends / Romantic Partners</b>
Group and gang membership
Best friends and romantic partner (incl. their problem behaviour)
<b>Victimisation</b>
Peer victimisation
Violent victimisation
<b>Personality</b>
Self-control

### 3.3 Age 15 (K6)

<b>Questionnaire Themes K6</b>
<b>Sociodemographics</b>
Demographic and socio-demographic information
Financial resources
<b>Physical Development and Health</b>
Perceived height, strength, fighting ability, and physical attractiveness
Disabilities
Pubertal development
General well-being
<b>Parent-Child Relationship</b>
Parenting (Alabama Parenting Questionnaire)
Relationship with separated parent: Frequency and quality
<b>School</b>
School experiences
Time spent on homework
School sanctions
<b>Life Events</b>
Most important life event since last survey
Life improvement
Life event calendar
<b>Leisure Activities / Media Use</b>
Leisure activities
Media use
Bedtime
<b>Social Behaviour / Social Problem-Solving</b>
Social behaviour (Social Behaviour Questionnaire)
Conflict coping
Social desirability
<b>Delinquency, Substance Use, and Contact with the Police</b>
Delinquency and related police contacts

Situational characteristics of assault
Substance use and related police contacts
Experiences with the police
<b>Legal Attitudes</b>
Legal cynicism
Police legitimacy
<b>Attitudes toward Crime and Violence</b>
Legitimacy of violence against women
Violence legitimising norms of masculinity
Violent ideations
Moral judgment
Decision making
Moral neutralization of violence
Shame and guilt
<b>Support / View of the Self / Resiliency</b>
Social support by peers and adults
Self-efficacy
Professional counseling, support, and medication
Generalised trust
<b>Peers / Friends / Romantic Partners</b>
Group and gang membership
Best friends and romantic partner (incl. their problem behaviour)
<b>Victimisation</b>
Peer victimisation
Violent victimisation
<b>Personality</b>
Self-control

### 3.4 Age 17 (K7)

<b>Questionnaire Themes K7</b>
<b>Sociodemographics</b>
Demographic and socio-demographic information
Educational and occupational status
Financial resources
<b>Physical Development and Health</b>
Perceived height, strength, fighting ability, and physical attractiveness
General well-being
<b>Parent-Child Relationship</b>
Parenting (Alabama Parenting Questionnaire)
Relationship with separated parent: Frequency and quality
<b>School</b>
School experiences
Time spent on homework
School sanctions
<b>Life Events</b>
Most important life event since last survey
Life improvement
Life event calendar
<b>Leisure Activities / Media Use</b>
Leisure activities
Media use
Bedtime
<b>Social Behaviour / Social Problem-Solving</b>
Social behaviour (Social Behaviour Questionnaire)
Conflict coping
Social desirability
<b>Delinquency, Substance Use, and Contact with the Police</b>
Delinquency and related police contacts
Situational characteristics of assault
Substance use and related police contacts
Experiences with the police
<b>Legal Attitudes</b>

Legal cynicism
Police legitimacy
<b>Attitudes toward Crime and Violence</b>
Legitimacy of violence against women
Violence legitimising norms of masculinity
Violent ideations
Violent extremist attitudes
Moral judgment
Decision making
Moral neutralization of violence
Shame and guilt
<b>Support / View of the Self / Resiliency</b>
Social support by peers and adults
Self-efficacy
Professional counseling, support, and medication
Generalised trust
<b>Peers / Friends / Romantic Partners</b>
Group and gang membership
Best friends and romantic partner (incl. their problem behaviour)
Intimate partner violence victimisation and perpetration
<b>Victimisation</b>
Peer victimisation
Violent victimisation
<b>Personality</b>
Self-control
<b>Sexual Orientation and Experience</b>
Sexual orientation
Sexual experiences (including pregnancy and rape)
Selling and buying sexual services

### 3.5 Age 20 (K8)

<b>Questionnaire Themes K8</b>
<b>Sociodemographics</b>
Demographic and socio-demographic information
Educational and occupational status
Leaving home: Motivation and current housing situation
Financial resources
Debts
Driver's license and vehicle ownership
Military and civilian service
Weapon ownership
<b>Physical Development and Health</b>
Perceived height, strength, fighting ability, and physical attractiveness
Perceived health, social status, and adulthood
General well-being
Perceived stress
<b>Parent-Child Relationship</b>
Relationship with parents: Frequency and quality
Relationship with separated parent: Frequency and quality
<b>Life Events</b>
Most important life event since last survey
Life improvement
Life event calendar
<b>Leisure Activities / Media Use</b>
Leisure activities
Media use
Bedtime
<b>Social Behaviour / Social Problem-Solving</b>
Social behaviour (Social Behaviour Questionnaire)
Conflict coping
Vengeance
Social desirability



<b>Delinquency, Substance Use, and Contact with the Police</b>
Delinquency and related police contacts
Situational characteristics of assault
Political and religious violence
Substance use and related police contacts
<b>Legal Attitudes</b>
Legal cynicism
Police legitimacy
Justice sensitivity
Cooperation with the police and courts
<b>Attitudes toward Crime and Violence</b>
Legitimacy of use of violence
Legitimacy of violence against women
Violence legitimising norms of masculinity
Violent ideations
Violent extremist attitudes
Moral judgment
Decision making
Moral neutralization of violence
Shame and guilt
<b>Support / View of the Self / Resiliency</b>
Social support by peers and adults
Self-efficacy
Professional counseling, support, and medication
Perception of the future self
Adult hope
Generalised trust
Perceived social exclusion
<b>Peers / Friends / Romantic Partners</b>
Group and gang membership
Best friends and romantic partner (incl. their problem behaviour)
Intimate partner violence victimisation and perpetration
<b>Victimisation</b>
Peer victimisation
Violent victimisation
General victimisation
<b>Personality</b>
Self-control
Psychopathy symptoms
Psychotic symptoms
<b>Sexual Orientation and Experience</b>
Sexual orientation
Sexual experiences (including pregnancy and rape)
Selling and buying sexual services



## 4 Questionnaire Themes by Age/Wave

The table below lists the questionnaire themes by data collection wave and age of the participants. The overall themes are listed in **bold** and grey scale. The sub-themes are listed below the overall themes.

	Age 11 K4	Age 13 K5	Age 15 K6	Age 17 K7	Age 20 K8
<b>Sociodemographics</b>					
Demographic and socio-demographic information	X	X	X	X	X
Educational and occupational status				X	X
Leaving home: Motivation and current housing situation					X
Financial resources	X	X	X	X	X
Debts					X
Driver's license and vehicle ownership					X
Military and civilian service					X
Weapon ownership					X
<b>Physical Development and Health</b>					
Perceived height, strength, fighting ability, and physical attractiveness			X	X	X
Perceived health, social status, and adulthood					X
Disabilities			X		
Pubertal development		X	X		
General well-being			X	X	X
Perceived stress					X
<b>Parent-Child Relationship</b>					
Parenting (Alabama Parenting Questionnaire)	X	X	X	X	
Relationship with parents: Frequency and quality					X
Relationship with separated parent: Frequency and quality			X	X	
<b>School</b>					
School experiences	X	X	X	X	
Time spent on homework	X	X	X	X	
School sanctions		X	X	X	
<b>Life Events</b>					
Most important life event since last survey			X	X	X
Life improvement			X	X	X
Life event calendar		X	X	X	X
<b>Leisure Activities / Media Use</b>					
Leisure activities	X	X	X	X	X
Media use	X	X	X	X	X
Bedtime	X	X	X	X	X
<b>Social Behaviour / Social Problem-Solving</b>					
Social behaviour (Social Behaviour Questionnaire)	X	X	X	X	X
Conflict coping	X	X	X	X	X
Vengeance					X
Social desirability	X	X	X	X	X
<b>Delinquency, Substance Use, and Contact with the Police</b>					
Delinquency and related police contacts	X	X	X	X	X
Contact with the police as an offender	X				
Situational characteristics of assault	X	X	X	X	X
Political and religious violence					X
Substance use and related police contacts		X	X	X	X
Experiences with the police		X	X	X	
<b>Legal Attitudes</b>					
Legal cynicism		X	X	X	X
Police legitimacy			X	X	X
Justice sensitivity					X
Cooperation with the police and courts					X
<b>Attitudes toward Crime and Violence</b>					
Legitimacy of use of violence					X
Legitimacy of violence against women			X	X	X
Violence legitimising norms of masculinity		X	X	X	X

Violent ideations			X	X	X
Violent extremist attitudes				X	X
Moral judgment		X	X	X	X
Decision making	X	X	X	X	X
Moral neutralization of violence	X	X	X	X	X
Shame and guilt		X	X	X	X
<b><u>Support / View of the Self / Resiliency</u></b>					
Social support by peers and adults		X	X	X	X
Self-efficacy			X	X	X
Professional counseling, support, and medication		X	X	X	X
Perception of the future self					X
Adult hope					X
Generalised trust		X	X	X	X
Perceived social exclusion		X			X
<b><u>Peers / Friends / Romantic Partners</u></b>					
Group and gang membership		X	X	X	X
Best friends and romantic partner (incl. their problem behaviour)	X	X	X	X	X
Intimate partner violence victimisation and perpetration				X	X
<b><u>Victimisation</u></b>					
Peer victimisation	X	X	X	X	X
Violent victimisation	X	X	X	X	X
General victimisation					X
<b><u>Personality</u></b>					
Self-control	X	X	X	X	X
Psychopathy symptoms					X
Psychotic symptoms					X
<b><u>Sexual Orientation and Experience</u></b>					
Sexual orientation				X	X
Sexual experiences (including pregnancy and rape)				X	X
Selling and buying sexual services				X	X

## 5 Sociodemographics

### 5.1 Across the surveys

	Age 11 K4	Age 13 K5	Age 15 K6	Age 17 K7	Age 20 K8
<b>Sociodemographics</b>					
Demographic and socio-demographic information	X	X	X	X	X
Educational and occupational status				X	X
Leaving home: Motivation and current housing situation					X
Financial resources	X	X	X	X	X
Debts					X
Driver's license and vehicle ownership					X
Military and civilian service					X
Weapon ownership					X

### 5.2 Demographic and socio-economic information

#### 5.2.1 Overview

<b>Demographic and socio-economic information</b>	
<b>Description</b>	<p>Participants reported demographic information, both concerning themselves and their parents or primary caregivers. The wording and the structure of this instrument is comparable to those of the "Socio-economic, Ethno-Cultural and Demographic Details" instrument used in the parent survey (P1), though from the youth/young adult perspective. It allowed for the collection of information among those families, where the primary caregiver refused to participate in the interviews (which applies to ca. 120 participants).</p> <p>Participants who did not take part in wave 5 but did in wave 6 were asked a number of additional questions (see variables starting with I6_ in SPSS). The combination variables "K5#6" comprise the key set of socio-demographic variables. The social background was asked for the first time in wave 5. At K6, it was asked of those who had not participated in the previous wave.</p> <p>Job profiles were coded based on the International Standard Classification of Occupation (ISCO). The International Standard Classification of Occupation (ISCO) is a classification system for occupational information that allows comparisons between European countries. It groups jobs according to the degree of similarity in their tasks in a hierarchical way.<sup>3</sup> ISCO-88 (1988) additionally considers the skill level that is required to fulfill these tasks. It defines four levels of aggregation: 10 major groups, 28 sub-major groups, 116 minor groups and 390 unit groups. In 2008, ISCO-08 was introduced. The main differences between ISCO-88 and ISCO-08 are improved categorization of management, information management, information and communication technology, and health care occupations.<sup>4</sup> In order to take these job profiles into account, the ISCO-08 coding was also used during data preparation. Source: Elias, P., &amp; Birch, M. (1994). Establishment of Community-Wide Occupational Statistics: ISCO 88 (COM), A Guide for Users. <i>Institute for Employment Research</i>. University of Warwick.</p>
<b>Source/Developer</b>	z-proso Project Team
<b>Number of Items</b>	Varied per wave: Individual level: 3 (K4), 6 (K5), 4 (K6-8) Household level: 12 (K4), 16 (K5), 8 (K6), 9 (K7), 8 (K8)
<b>Response Categories</b>	Varied per item. See below for details.
<b>Derived Constructs</b>	Date of birth Gender Height, weight, and BMI (K5-9_BMI) Religion (K5#6_105r) Participant's birth country (K5#6_106r) Father's birth country (K5#6_107r) Mother's birth country (K5#6_109r) Parents' place and year of birth and migrant status (K5#6_MigHH3, K5#6_MigHH2, K456_MigHH2) Marital status of parents

<sup>3</sup> Compare the ISCO-website for more information: <https://www.ilo.org/public/english/bureau/stat/isco/>.

<sup>4</sup> Compare <https://www.bfs.admin.ch/bfs/de/home/statistiken/arbeit-erwerb/nomenclaturen/isco-08.assetdetail.10227455.html>.

	Household members (K5-8_siblingsHH, K7-8_ParStruct) Employment and educational status of female primary caregiver (K4-5_FPC_ISCO, K5#6_FPC_ISCO, K4-5_FPC_ISEL, K5#6_FPC_ISEL, K5#6_152, K5#6_153), male primary caregiver (K4-5_MPC_ISCO, K5#6_MPC_ISCO, K4-5_MPC_ISEL, K5#6_MPC_ISEL, K5#6_162, K5#6_163), and both (K5_EduMax, K5#6_EduMax, K5#6_ISEImax, K456_ISEImax) Primary caregiver (K5#6_151, K5#6_161) Language spoken with primary caregivers (K5#6_154r1, K5#6_154r2, K5#6_164r1, K5#6_164r2) K5#6_Source
<b>Administration History</b>	K4-8
<b>Key Publications</b>	Shanahan, L., Steinhoff, A., Bechtiger, L., Murray, A., Nivette, A., Hepp, U., Ribeaud, D., & Eisner, M. (2022). Emotion  al distress in young adults during the COVID-19 pandemic: Evidence of risk and resilience from a longitudinal cohort study. <i>Psychological Medicine</i> , 52, 824-833. <a href="https://doi.org/10.1017/S003329172000241X">https://doi.org/10.1017/S003329172000241X</a>  Steinhoff, A., Shanahan, L., Bechtiger, L., Zimmermann, J., Ribeaud, D., Eisner, M., Baumgartner, M., & Quednow, B. (2023). When substance use is underreported: comparing self-reports and hair toxicology in an urban cohort of young adults. <i>Journal of the American Academy of Child and Adolescent Psychiatry</i> , 62(7), 791-804. <a href="https://doi.org/10.1016/j.jaac.2022.11.011">https://doi.org/10.1016/j.jaac.2022.11.011</a>

### 5.3 Educational and occupational status

#### 5.3.1 Overview

<b>Educational and occupational status</b>	
<b>Description</b>	Participants reported on their current and highest level of education and also on their field of study and the year in which they completed their studies. Additional questions enquired about employment.  Job profiles were coded based on the International Standard Classification of Occupation (ISCO) (see section 5.2.1 for more information). The social status of an occupation was measured using the International Socio-Economic Index of Occupational Status (ISEI) that combines income and education. The index is based on a meta-analysis of comparably coded data on education, occupation, and income for 73,901 full-time employed men from 16 countries (Ganzeboom et al. 1992). The index ranges from 16 (e.g., unskilled workers and cleaners), to 90 (judges) and allows a translation from the ISCO code into the ISEI value. Source: Ganzeboom, H. B., De Graaf, P. M., & Treiman, D. J. (1992). A standard international socio-economic index of occupational status. <i>Social science research</i> , 21(1), 1-56.
<b>Source/Developer</b>	z-proso Project Team
<b>Number of Items</b>	Varied per wave: 3 (K7), 10 (K8)
<b>Response Categories</b>	Varied per item. See below for details.
<b>Derived Constructs</b>	International Standard Classification of Occupations (K7-8_ISCO88_EGO) International Socio-Economic Index (K7-8_ISEI88_EGO) International Standard Classification of Education (K8_1890_ISCED, K8_1890_ISCED2, K8_1891nb_ISCED, K8_1891nb_ISCED2) Years of Education (K8_edyears) Field of Education (K8_1890_subject, K8_1891_subject)
<b>Administration History</b>	K7-8
<b>Key Publications</b>	None

#### 5.3.2 Derived Education Variables (K8)

To categorise the participants highest level of education completed at K8, as well as the level of the current education, the International Standard Classification of Education (ISCED) was used. The

ISCED-2011 codes range from 0 to 8. Applied to the Swiss school system, an ISCED code of 0 means kindergarden and 1 primary school. The compulsory school time in Switzerland includes secondary school and has the ISCED code 2. Basic (vocational) training is indicated with ISCED 3 (e.g., vocational apprenticeship or baccalaureate). ISCED 4 and 5 stand for specialised post-secondary programmes that are not applicable to the answer categories used in the questionnaire. ISCED 6 to 8 refer to tertiary education, while ISCED 6 stands for bachelor and equivalent education programmes (e.g., Professional Education and Training with Advanced Federal Diploma of Higher Education), ISCED 7 for master and equivalent education programmes (e.g., Federal Diploma of Higher Education) and ISCED 8 for a PhD<sup>5</sup>.

The ISCED-2011 codes can be differentiated between job-oriented or academic education. In the derived two-digit variables (\_ISCED2), the first number refers to the initial ISCED code of the educational level and the second number indicates if the education is job-oriented (= 4) or academic (= 5). From the highest level of education completed a variable for years of education was derived, starting from 9 years (compulsory school time) up to 20 years (PhD).

An additional variable combining the information about the level of education with the information about the field of education was derived for the highest level of education completed as well as for the current education (K8\_1890\_subject, K8\_1891\_subject). The pre-decimal value represents the level of education and is identical with the value labels of the original variable, with one exception. Since an Advanced Federal Diploma of Higher Education has a lower ISCED code than a Federal Diploma of Higher Education, Advanced Federal Diploma of Higher Education has newly been assigned the value 100 instead of 10. The decimal values indicate the subject area of education (e.g., 1 = secretarial and office work).

## 5.4 Leaving home: Motivation and current housing situation

### 5.4.1 Overview

<b>Leaving home: Motivation and current housing situation</b>	
<b>Description</b>	Those participants who reported that they had moved out of the parental home (see above, Demographic and socio-economic information) were asked follow-up questions on the timing of and their reasons for leaving home. In addition, they were asked about their current household composition.
<b>Source/Developer</b>	z-proso Project Team
<b>Number of Items</b>	3
<b>Response Categories</b>	Varied per item. See below for details.
<b>Derived Constructs</b>	Motivation for leaving home Household composition
<b>Administration History</b>	K7-8
<b>Key Publications</b>	None

## 5.5 Financial resources

### 5.5.1 Overview

<b>Financial resources</b>
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<sup>5</sup> For further information see: <https://www.bfs.admin.ch/asset/de/248786>

<b>Description</b>	Participants were asked about the different types of financial resources they had at their disposal, including (depending on the wave of data collection) pocket money, job income, and other financial resources. They were also asked about the amount of money that was available to them, in particular the amount they could spend on going out.
<b>Source/Developer</b>	z-proso Project Team, adapted from an instrument developed by the Kriminologisches Forschungsinstitut Niedersachsen (KFN). Wetzels, P., Enzmann, D., Mecklenburg, E., & Pfeiffer, C. (2001). <i>Jugend und Gewalt. Eine repräsentative Dunkelfeldanalyse in München und acht anderen deutschen Städten</i> [Youth and Violence. A Representative Dark Number Study in Munich and Eight Other German Cities]. Baden-Baden, Germany: Nomos. <a href="https://repository.difu.de/jspui/handle/difu/278866">https://repository.difu.de/jspui/handle/difu/278866</a>
<b>Number of Items</b>	Varied per wave: 1 (K4), 2 (K5-6), 3 (K7), 8 (K8)
<b>Response Categories</b>	Varied per item. See below for details.
<b>Derived Constructs</b>	Available money for leisure activities per month (K5-6_Money, K7-8_LeisMoney) Total monthly income (K7-8_TotalMoney) Total freely available money per month (K7-8_AvailMoney)
<b>Administration History</b>	K4-8
<b>Key Publications</b>	None

## 5.6 Debts

### 5.6.1 Overview

<b>Debts</b>	
<b>Description</b>	Participants were asked whether they had debts of more than 100 CHF to six different types of creditors: a) parents and other family members, b) partner, c) friends, d) bank (personal credit, credit card), e) bank (mortgage), and f) other company (leasing contract, down payment).
<b>Source/Developer</b>	z-proso Project Team
<b>Number of Items</b>	12 (2 per creditor)
<b>Response Categories</b>	Varied per item. See below for details.
<b>Derived Constructs</b>	Prevalence of personal debts (K8_TotalDebts) Number of different creditors to whom money is owed
<b>Administration History</b>	K8
<b>Key Publications</b>	None

## 5.7 Driver's license and vehicle ownership

### 5.7.1 Overview

<b>Driver's license and vehicle ownership</b>	
<b>Description</b>	Participants were asked whether or not they had a driver's license and, if so, the type of license. In addition, they were asked whether they had a motorcycle or car and, if so, what type.
<b>Source/Developer</b>	z-proso Project Team
<b>Number of Items</b>	4
<b>Response Categories</b>	Varied per item. See below for details.
<b>Derived Constructs</b>	Driver's license Vehicle ownership
<b>Administration History</b>	K8
<b>Key Publications</b>	None



## 5.8 Military and civilian service

### 5.8.1 Overview

<b>Military and civilian service</b>	
<b>Description</b>	Participants were asked whether they served in the Swiss army and, if so, whether they kept the weapon that they received from the army at home. Since army service is mandatory for male Swiss citizens and voluntary for female Swiss citizens, the instrument was given to male participants only.
<b>Source/Developer</b>	z-proso Project Team
<b>Number of Items</b>	2
<b>Response Categories</b>	Multiple choice
<b>Derived Constructs</b>	Membership of the Swiss army Presence of service weapon at home
<b>Administration History</b>	K8
<b>Key Publications</b>	None

## 5.9 Weapon ownership

### 5.9.1 Overview

<b>Weapon ownership</b>	
<b>Description</b>	Participants were asked whether they owned and had free access to a range of weapons. Both legal and illegal weapon ownership was included. Weapons from the army were explicitly excluded since they were included in a different item battery (see above, Military and civilian service).
<b>Source/Developer</b>	z-proso Project Team
<b>Number of Items</b>	8
<b>Response Categories</b>	3-point scale (from "No, none" to "Yes, several")
<b>Derived Constructs</b>	Weapon ownership (K8_WeaponOwn, K8_WeaponOwn2, K8_Softair, K8_SoftairLeg, K8_Firearm, K8_Firearm2, K8_StingWeapon, K8_PercWeapon)
<b>Administration History</b>	K8
<b>Key Publications</b>	None



## 6 Physical Development and Health

### 6.1 Across the surveys

	Age 11 K4	Age 13 K5	Age 15 K6	Age 17 K7	Age 20 K8
<b>Physical Development and Health</b>					
Perceived height, strength, fighting ability, and physical attractiveness			X	X	X
Perceived health, social status, and adulthood					X
Disabilities			X		
Pubertal development		X	X		
General well-being			X	X	X
Perceived stress					X

### 6.2 Perceived height, strength, fighting ability, and physical attractiveness

#### 6.2.1 Overview

<b>Perceived height, strength, fighting ability, and physical attractiveness</b>	
<b>Description</b>	Participants reported on their perceived height, strength, fighting ability, and physical attractiveness as compared to those of other persons their age. There were gender-specific versions of this instrument, i.e., females were asked to compare themselves with other females their age, and males were asked to compare themselves with other males their age.
<b>Source/Developer</b>	Sell et al. (2009), adapted for z-proso: Sell, A., Tooby, J., & Cosmides, L. (2009). Formidability and the logic of human anger. <i>Proceedings of the National Academy of Sciences</i> , 106(35), 15073-15078. <a href="https://doi.org/10.1073/pnas.0904312106">https://doi.org/10.1073/pnas.0904312106</a>
<b>Number of Items</b>	4 gender-specific items (i.e., 4 items for females and 4 for males)
<b>Response Categories</b>	Open answers (numerical), theoretically ranging from 0 to 100
<b>Derived Constructs</b>	Perceived fighting ability (K6-7_962fm, K6-7_963fm) Perceived physical attractiveness (K6-7_961fm, K6-7_964fm)
<b>Administration History</b>	K6-8
<b>Key Publications</b>	Sell, A., Eisner, M., & Ribeaud, D. (2015). Bargaining power and individual differences in adolescent aggression: the role of fighting ability, coalitional strength and mate value. <i>Evolution and Human Behavior</i> , 44(4), 663–675. <a href="https://doi.org/10.1016/j.evolhumbehav.2015.09.003">https://doi.org/10.1016/j.evolhumbehav.2015.09.003</a>  Raible-Destan, N., Stulz, N., Hepp, U., Ribeaud, D., Eisner, M., Steinhoff, A., Shanahan, L., Sell, A., & Kupferschmied, S. (2022). Self-rated physical attractiveness and its relation to psychological well-being across adolescence. <i>European Journal of Developmental Psychology</i> , 19(4), 528-546. <a href="https://doi.org/10.1080/17405629.2021.1931104">https://doi.org/10.1080/17405629.2021.1931104</a>

### 6.3 Perceived health, social status, and adulthood

#### 6.3.1 Overview

<b>Perceived health, social status, and adulthood</b>	
<b>Description</b>	Participants reported on their perceived health, social status, and adulthood as compared to those of other persons their age.
<b>Source/Developer</b>	z-proso Project Team
<b>Number of Items</b>	3
<b>Response Categories</b>	Open answers (numerical), theoretically ranging from 0 to 100
<b>Derived Constructs</b>	Perceived health Perceived social status Perceived adulthood

<b>Administration History</b>	K8
<b>Key Publications</b>	Shanahan, L., Steinhoff, A., Bechtiger, L., Murray, A., Nivette, A., Hepp, U., Ribeaud, D., & Eisner, M. (2022). Emotional distress in young adults during the COVID-19 pandemic: Evidence of risk and resilience from a longitudinal cohort study. <i>Psychological Medicine</i> , 52, 824-833. <a href="https://doi.org/10.1017/S003329172000241X">https://doi.org/10.1017/S003329172000241X</a>

## 6.4 Disabilities

### 6.4.1 Overview

<b>Disabilities</b>	
<b>Description</b>	Participants reported on six types of long-term health issues. A different, though related, instrument was included in the first parent interview (P1).
<b>Source/Developer</b>	z-proso Project Team
<b>Number of Items</b>	6
<b>Response Categories</b>	Dichotomous (yes/no)
<b>Derived Constructs</b>	Disabilites (K6_Disab6, K6_Disab5)
<b>Administration History</b>	K6
<b>Key Publications</b>	None

## 6.5 Pubertal development

### 6.5.1 Overview

<b>Pubertal Development Scale</b>	
<b>Description</b>	Participants reported on their physical development during puberty. There were gender-specific versions of this instrument, i.e., females were asked about female-specific pubertal development, and males were asked about male-specific pubertal development.
<b>Source/Developer</b>	Petersen, A. C., Crockett, L., Richards, M., & Boxer, A. (1988). A self-report measure of pubertal status: Reliability, validity and initial norms. <i>Journal of Youth and Adolescence</i> , 17, 117-133 doi: <a href="https://doi.org/10.1007/BF01537962">https://doi.org/10.1007/BF01537962</a>  z-proso uses the German version: Watzlawik, M. (2009). Die Erfassung des Pubertätsstatus anhand der Pubertal Development Scale. <i>Diagnostica</i> 55(1), 55-65. <a href="https://doi.org/10.1026/0012-1924.55.1.55">https://doi.org/10.1026/0012-1924.55.1.55</a>
<b>Number of Items</b>	3 gender-specific items (i.e., 3 items for females and 3 for males)
<b>Response Categories</b>	Varied per item. See below for details.
<b>Derived Constructs</b>	Pubertal development (K5-6_Pubert)
<b>Administration History</b>	K5-6
<b>Key Publications</b>	None

## 6.6 General well-being

### 6.6.1 Overview

<b>General well-being</b>	
<b>Description</b>	The respondents reported on their present feelings toward their general well-being and life.
<b>Source/Developer</b>	z-proso Project Team
<b>Number of Items</b>	4
<b>Response Categories</b>	4-point Likert scale (from “fully untrue” to “fully true”)
<b>Derived Constructs</b>	General well-being (K6-8_Opti)
<b>Administration History</b>	K6-8
<b>Key Publications</b>	Murray, A., Nagin, D., Obsuth, I., Ribeaud, D., & Eisner, M. (2022). Young adulthood outcomes of joint mental health trajectories: A group-based trajectory model analysis of a 13-year longitudinal cohort study. <i>Child Psychiatry &amp; Human Development</i> , 53, 1083-1096. <a href="https://doi.org/10.1007/s10578-021-01193-8">https://doi.org/10.1007/s10578-021-01193-8</a>

## 6.7 Perceived stress

### 6.7.1 Overview

<b>Perceived Stress Scale</b>	
<b>Description</b>	Participants reported on their feelings, anxiety, and worries in the past month.
<b>Source/Developer</b>	Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. <i>Journal of Health and Social Behavior</i> , 24(4), 385-396. <a href="https://doi.org/10.2307/2136404">https://doi.org/10.2307/2136404</a>
<b>Number of Items</b>	4
<b>Response Categories</b>	5-point scale (from “never” to “very often”)
<b>Derived Constructs</b>	Perceived stress (K8_Stress)
<b>Administration History</b>	K8
<b>Key Publications</b>	Murray, A., Nagin, D., Obsuth, I., Ribeaud, D., & Eisner, M. (2022). Young adulthood outcomes of joint mental health trajectories: A group-based trajectory model analysis of a 13-year longitudinal cohort study. <i>Child Psychiatry &amp; Human Development</i> , 53, 1083-1096. <a href="https://doi.org/10.1007/s10578-021-01193-8">https://doi.org/10.1007/s10578-021-01193-8</a>  Shanahan, L., Steinhoff, A., Bechtiger, L., Murray, A., Nivette, A., Hepp, U., Ribeaud, D., & Eisner, M. (2022). Emotional distress in young adults during the COVID-19 pandemic: Evidence of risk and resilience from a longitudinal cohort study. <i>Psychological Medicine</i> , 52, 824-833. <a href="https://doi.org/10.1017/S003329172000241X">https://doi.org/10.1017/S003329172000241X</a>



## 7 Parent-Child Relationship

### 7.1 Across the surveys

	Age 11 K4	Age 13 K5	Age 15 K6	Age 17 K7	Age 20 K8
<b>Parent-Child Relationship</b>					
Parenting (Alabama Parenting Questionnaire)	X	X	X	X	
Relationship with parents: Frequency and quality					X
Relationship with separated parent: Frequency and quality			X	X	

### 7.2 Parenting (Alabama Parenting Questionnaire)

#### 7.2.1 Overview

<b>Parenting (Alabama Parenting Questionnaire)</b>	
<b>Description</b>	This instrument measured the parenting practices of the participants' primary caregivers. Depending on the wave of data collection, it included up to eight subdimensions of parenting: parental involvement, parental monitoring (including parental supervision and child disclosure), positive parenting, parental conflict, authoritarian parenting, corporal punishment, inconsistent discipline, and "other" punishment practices. The questionnaire was separated into a section on parenting styles (PAR1) and one on punishment (PAR2). It was discontinued after K7 due to its decreasing relevance in relation to the participants' age. This instrument follows the parental report of parenting measured at ages 7, 8, 9, and 11. At age 11, parenting was assessed in both the parent and child interview.
<b>Source/Developer</b>	<p>The instrument combines and adapts items from the Alabama Parenting Questionnaire (Shelton et al., 1996) and the Parenting Scale from the Kriminologisches Forschungsinstitut Niedersachsen (Wetzels et al., 2001).</p> <p>Shelton, K. K., Frick, P. J., &amp; Wootton, J. (1996). Assessment of parenting practices in families of elementary school-age children. <i>Journal of Clinical Child Psychology</i>, 25(3), 317–329. <a href="https://doi.org/10.1207/s15374424jccp2503_8">https://doi.org/10.1207/s15374424jccp2503_8</a></p> <p>Wetzels, P., Enzmann, D., Mecklenburg, E., &amp; Pfeiffer, C. (2001). <i>Jugend und Gewalt. Eine repräsentative Dunkelfeldanalyse in München und acht anderen deutschen Städten</i> [Youth and Violence. A Representative Dark Number Study in Munich and Eight Other German Cities]. Baden-Baden, Germany: Nomos. <a href="https://repository.difu.de/jspui/handle/difu/278866">https://repository.difu.de/jspui/handle/difu/278866</a></p>
<b>Number of Items</b>	<p>Varied per wave: The number of items changed over the waves due to developmental adaptations in accordance with the participants' age as well as space constraints.</p> <p>PAR1: 16 items (K4), 20 items (K5), 23 items (K6-7)</p> <p>PAR2: 10 items (K4), 14 items (K5-6), 13 items (K7)</p>
<b>Response Categories</b>	4-point scale (from "never" to "often/always")
<b>Derived Constructs</b>	<p>Two types of derived constructs:</p> <p><b>Type 1 – Parenting Style (PAR1)</b></p> <p><i>Main constructs:</i></p> <p>Parental involvement (K4-7_involv)</p> <p>Parental supervision/monitoring (K4_monitor4, K5-7_monitor7)</p> <p>Positive parenting (K4_pospar2, K5-7_pospar)</p> <p>Parental conflict (K6-7_parconfl)</p> <p>Authoritarian parenting (K4-7_author)</p> <p><i>Additional constructs:</i></p> <p>Child disclosure (sub-selection of parental monitoring) (K4_disclos2, K5-7_disclos)</p> <p>Parental supervision (sub-selection of parental monitoring) (K4_parctrl2, K5-7_parctrl)</p> <p><b>Type 2 – Punishment (PAR2)</b></p> <p><i>Main constructs:</i></p> <p>Corporal punishment (K4&amp;7_corpsanct3, K5-6_corpsanct)</p> <p>Inconsistent discipline (K5-7_erratic, K5-7_erratic_b)</p> <p>Other punishment strategies (K4-7_othersanct)</p> <p><i>Additional constructs:</i></p>

	Aversive parenting (combines corporal punishment and inconsistent discipline) (K4_avers_b6, K5-6_avers, K5-6_avers_b, K7_avers9, K7_avers_b8)
<b>Administration History</b>	K4-7
<b>Key Publications</b>	<p>Nivette, A., Eisner, M., &amp; Ribeaud, D. (2017). Developmental predictors of violent extremist attitudes: A test of general strain theory. <i>Journal of Research in Crime and Delinquency</i>, 54(6), 755-790. <a href="https://doi.org/10.1177/0022427817699035">https://doi.org/10.1177/0022427817699035</a></p> <p>Van Gelder, J.-L., Averdijk, M., Ribeaud, D., &amp; Eisner, M. (2018). Punitive parenting and delinquency: The mediating role of short-term mindsets. <i>British Journal of Criminology</i>, 58, 644-666. <a href="https://doi.org/10.1093/bjc/azx042">https://doi.org/10.1093/bjc/azx042</a></p> <p>Neaverson, A., Murray, A., Ribeaud, D., &amp; Eisner, M. (2020). A longitudinal examination of the role of self-control in the relation between corporal punishment exposure and adolescent aggression. <i>Journal of Youth and Adolescence</i>, 49(6), 1245-1259. <a href="https://doi.org/10.1007/s10964-020-01215-z">https://doi.org/10.1007/s10964-020-01215-z</a></p> <p>Huijsmans, T., Nivette, A., Eisner, M., &amp; Ribeaud, D. (2021). Social influences, peer delinquency, and low self-control: An examination of time-varying and reciprocal effects on delinquency over adolescence. <i>European Journal of Criminology</i>, 18(2), 192-212. <a href="https://doi.org/10.1177/1477370819838720">https://doi.org/10.1177/1477370819838720</a></p> <p>Rodriguez-Ruiz, J., Zych, I., Ribeaud, D., Steinhoff, A., Eisner, M., Quednow, B., &amp; Shanahan, L. (2023). The influence of different dimensions of the parent-child relationship in childhood as longitudinal predictors of substance use in late adolescence. The mediating role of self-control. <i>International Journal of Mental Health and Addiction</i>, advance online publication. <a href="https://doi.org/10.1007/s11469-023-01036-8">https://doi.org/10.1007/s11469-023-01036-8</a></p> <p>Silletti, F., Iannello, N.; Ingoglia, S.; Inguglia, C.; Cassibba, R.; Eisner, M.; Ribeaud, D.; Musso, P. (2023). Do self-control and parental involvement promote prosociality and hinder internalizing problems? A four-wave longitudinal study from early to mid-to-late adolescence. <i>Journal of Early Adolescence</i>, advance online publication. <a href="https://doi.org/10.1177/02724316231210250">https://doi.org/10.1177/02724316231210250</a></p>

### 7.3 Relationship with parents: Frequency and quality

#### 7.3.1 Overview

<b>Relationship with parents: Frequency and quality</b>	
<b>Description</b>	Participants reported on their contact with their biological parents within the last 12 months. The instrument distinguished between the participant's mother and father and asked about the frequency and the quality of the contact.
<b>Source/Developer</b>	z-proso Project Team
<b>Number of Items</b>	4 (2 about the contact with the mother, 2 about the contact with the father. For each parent, 1 question assessed the frequency of the contact and 1 the quality).
<b>Response Categories</b>	Varied per item. See below for details.
<b>Derived Constructs</b>	Frequency of contact with parents Quality of contact with parents
<b>Administration History</b>	K8
<b>Key Publications</b>	None

### 7.4 Relationship with separated parent: Frequency and quality

#### 7.4.1 Overview

<b>Relationship with separated parent: Frequency and quality</b>	
<b>Description</b>	Those participants who reported that their parents had separated were asked about the frequency and quality of contact with the parent whom they were not living with. These items were part of the item battery on Demographics and socioeconomic information.
<b>Source/Developer</b>	z-proso Project Team



<b>Number of Items</b>	4 (2 about the contact with the mother, 2 about the contact with the father. For each parent, 1 question assessed the frequency of the contact and 1 the quality).
<b>Response Categories</b>	Varied per item. See below for details.
<b>Derived Constructs</b>	Frequency of contact with separated parent Quality of contact with separated parent
<b>Administration History</b>	K5-7
<b>Key Publications</b>	None



## 8 School

### 8.1 Across the surveys

	Age 11 K4	Age 13 K5	Age 15 K6	Age 17 K7	Age 20 K8
<b>School</b>					
School experiences	X	X	X	X	
Time spent on homework	X	X	X	X	
School sanctions		X	X	X	

### 8.2 School experiences

#### 8.2.1 Overview

<b>School Scale (School bonding, relationship with teacher and classmates)</b>	
<b>Description</b>	<p>Participants reported on a number of experiences related to school, including their commitment to school, their bond with their teacher and classmates, difficulties in school, and their future orientation toward school.</p> <p>In K7, the items were only completed by those participants who were still attending school.</p>
<b>Source/Developer</b>	<p>z-proso Project Team, partly based on an instrument developed by the Kriminologisches Forschungsinstitut Niedersachsen (KFN).</p> <p>Wetzels, P., Enzmann, D., Mecklenburg, E., &amp; Pfeiffer, C. (2001). <i>Jugend und Gewalt. Eine repräsentative Dunkelfeldanalyse in München und acht anderen deutschen Städten</i> [Youth and Violence. A Representative Dark Number Study in Munich and Eight Other German Cities]. Baden-Baden, Germany: Nomos. <a href="https://repository.difu.de/jspui/handle/difu/278866">https://repository.difu.de/jspui/handle/difu/278866</a></p>
<b>Number of Items</b>	Varied per wave: 9 (K4), 17 (K5-6), 16 (K7)
<b>Response Categories</b>	4-point Likert scale (from «fully untrue» to «fully true»)
<b>Derived Constructs</b>	<p>School commitment (K4-7_SchoolCommit, K5-7_SchoolCommit4)</p> <p>Bond to teacher (K4-7_SchoolTeach)</p> <p>Bond to class (K4-7_SchoolClass)</p> <p>School difficulties (K5-7_SchoolDiffic)</p> <p>Commitment to the future (K5-7_SchoolFutur)</p>
<b>Administration History</b>	K4-7
<b>Key Publications</b>	<p>Obsuth, I., Murray, A. L., Malti, T., Sulger, P., Ribeaud, D., &amp; Eisner, M. (2017). A non-bipartite propensity score analysis of the effects of teacher–student relationships on adolescent problem and prosocial behavior. <i>Journal of Youth and Adolescence</i>, 46(8), 1661-1687. <a href="https://doi.org/10.1007/s10964-016-0534-y">https://doi.org/10.1007/s10964-016-0534-y</a></p> <p>Van Gelder, J.-L., Averdijk, M., Ribeaud, D., &amp; Eisner, M. (2018). Punitive parenting and delinquency: The mediating role of short-term mindsets. <i>British Journal of Criminology</i>, 58, 644-666. <a href="https://doi.org/10.1093/bjc/azx042">https://doi.org/10.1093/bjc/azx042</a></p> <p>Van Gelder, J.-L., Averdijk, M., Ribeaud, D., &amp; Eisner, M. (2020). Sanctions, short-term mindsets and delinquency: Reverse causality in a sample of high school youth. <i>Legal and Criminological Psychology</i>, 25(2), 199-218. <a href="https://doi.org/10.1111/lcrp.12170">https://doi.org/10.1111/lcrp.12170</a></p> <p>Defoe, I., van Gelder, J.-L., Ribeaud, D., &amp; Eisner, M. (2021). The co-development of friend delinquency with adolescent delinquency and short-term mindsets: The moderating role of co-offending. <i>Journal of Youth and Adolescence</i>, 50, 1601-1615. <a href="https://doi.org/10.1007/s10964-021-01417-z">https://doi.org/10.1007/s10964-021-01417-z</a></p> <p>Murray, A., Obsuth, I., Speyer, L., McKenzie, K., Murray, G., Ribeaud, D., &amp; Eisner, M. (2021). Developmental cascades from aggression to internalizing problems via peer and teacher relationships from early to middle adolescence. <i>Journal of Youth and Adolescence</i>, 50, 663-673. <a href="https://doi.org/10.1007/s10964-021-01396-1">https://doi.org/10.1007/s10964-021-01396-1</a></p>

- Neaverson, A., Murray, A., Eisner, M., & Ribeaud, D. (2022). Disrupting the link between corporal punishment exposure and adolescent aggression: The role of teacher-child relationships. *Journal of Youth and Adolescence*, 51, 2265-2280. <https://doi.org/10.1007/s10964-022-01666-6>
- Nivette, A., Obsuth, I., Ribeaud, D., & Eisner, M. (2022). Fair teachers, fair police? Assessing the quasi-causal pathways between perceptions of teacher and police authority in childhood and adolescence. *Journal of Youth and Adolescence*, 51, 193-207. <https://doi.org/10.1007/s10964-021-01537-6>
- Valdebenito, S., Speyer, L., Murray, A., Ribeaud, D., & Eisner, M. (2022). Associations between student-teacher bonds and oppositional behavior against teachers in adolescence: A longitudinal analysis from ages 11 to 15. *Journal of Youth and Adolescence*, 51, 1997-2007, <https://doi.org/10.1007/s10964-022-01645-x>
- Obsuth, I., Murray, A., Knoll, M., Ribeaud, D., & Eisner, M. (2023). Teacher-student relationships in childhood as a protective factor against adolescent delinquency up to age 17 – a propensity score matching approach. *Crime and Delinquency*, 69(4), 727-755. <https://doi.org/10.1177/00111287211014153>
- Speyer, L.; Obsuth, I.; Eisner, M.; Ribeaud, D.; Murray, A. (2023). Does prosociality in early- to mid-adolescence protect against later development of antisocial behaviours? *Journal of Early Adolescence*, advance online publication. <https://doi.org/10.1177/02724316231210254>
- Steinhoff, A., Ribeaud, D., Eisner, M., & Shanahan, L. (2023). Developmental trajectories of self-, other-, and dual-harm across adolescence: The role of relationships with peers and teachers. *Psychopathology*, 56(1-2), 138-147. <https://doi.org/10.1159/000525296>

## 8.3 Time spent on homework

### 8.3.1 Overview

<b>Time spent on homework</b>	
<b>Description</b>	Participants reported on the average time they spent on their homework on a regular schoolday.
<b>Source/Developer</b>	z-proso Project Team
<b>Number of Items</b>	1
<b>Response Categories</b>	7-point scale (from "no time" to "more than 3 hours")
<b>Derived Constructs</b>	Average time for homework (K5-6_1821)
<b>Administration History</b>	K5-6
<b>Key Publications</b>	None

## 8.4 School sanctions

### 8.4.1 Overview

<b>School sanctions</b>	
<b>Description</b>	<p>Participants reported on sanctions they had received from a teacher or their school for their problem behavior. Follow-up questions were asked for the most recent of these experiences, including the time, place, and type of sanction.</p> <p>School sanctions were also assessed in the life event calendar. The current instrument is different in that it includes a wider range of sanctions (i.e., the life event calendar only includes school exclusion) as well as details.</p>
<b>Source/Developer</b>	z-proso Project Team
<b>Number of Items</b>	4
<b>Response Categories</b>	Varied per item. See below for details.

<b>Derived Constructs</b>	Prevalence of school sanctions Reason for most recent school sanction Time and place of most recent school sanction Type of most recent school sanction
<b>Administration History</b>	K5-7
<b>Key Publications</b>	Van Gelder, J.-L., Averdijk, M., Ribeaud, D., & Eisner, M. (2020). Sanctions, short-term mindsets and delinquency: Reverse causality in a sample of high school youth. <i>Legal and Criminological Psychology</i> , 25(2), 199-218. <a href="https://doi.org/10.1111/lcrp.12170">https://doi.org/10.1111/lcrp.12170</a>



## 9 Life Events

### 9.1 Across the surveys

	Age 11 K4	Age 13 K5	Age 15 K6	Age 17 K7	Age 20 K8
<b>Life Events</b>					
Most important life event since last survey			X	X	X
Life improvement			X	X	X
Life event calendar		X	X	X	X

### 9.2 Most important life event since last survey

#### 9.2.1 Overview

<b>Most important life event since the last survey</b>	
<b>Description</b>	Respondents reported the most important life event since the last survey.
<b>Source/Developer</b>	z-proso Project Team
<b>Number of Items</b>	1
<b>Response Categories</b>	Open answers (text)
<b>Derived Constructs</b>	Most important life event (K6_10_SubCat_1, K6_10_MainCat_1, K6_10_Valence, K6_10_SubCat_2, K6_10_MainCat_2, K6_10_Valence_2)
<b>Administration History</b>	K6-8
<b>Key Publications</b>	None

### 9.3 Life improvement

#### 9.3.1 Overview

<b>Live improvement</b>	
<b>Description</b>	Respondents reported whether or not they believed that overall, their life had improved since the last survey.
<b>Source/Developer</b>	z-proso Project Team
<b>Number of Items</b>	1
<b>Response Categories</b>	5-point scale (from “much better” to “much worse”)
<b>Derived Constructs</b>	Life improvement
<b>Administration History</b>	K6-8
<b>Key Publications</b>	None

### 9.4 Life event calendar

#### 9.4.1 Overview

<b>Life Events Scale</b>	
<b>Description</b>	For every 6 months since the past survey, the respondents were asked about life events and changes in the family context. The themes included were, for example: family, school, victimisation, and personal relationships. Individual items enquired about, for example, experiences with out-of-home-placement, health issues, death and illness in the family, new family members, school exclusion, experiences with the police, romantic experiences, and burglary, sexual, robbery and theft victimisation.

<b>Source/Developer</b>	z-proso Project Team
<b>Number of Items</b>	Varied per wave: 25 (K5), 26 (K6), 31 (K7), 42 (K8)
<b>Response Categories</b>	Dichotomous (yes/no)
<b>Derived Constructs</b>	Life Events Scale (mean across 21 items; K5-7_LEvent21)
<b>Administration History</b>	K5-8
<b>Key Publications</b>	<p>Nivette, A., Eisner, M., &amp; Ribeaud, D. (2017). Developmental predictors of violent extremist attitudes: A test of general strain theory. <i>Journal of Research in Crime and Delinquency</i>, 54(6), 755-790. <a href="https://doi.org/10.1177/0022427817699035">https://doi.org/10.1177/0022427817699035</a></p> <p>Averdijk, M., Ribeaud, D., &amp; Eisner, M. (2018). The long-term effects of out-of-home placement in late adolescence: A propensity score matching analysis among Swiss youths. <i>Longitudinal and Life Course Studies</i>, 9(1), 30-57. <a href="https://doi.org/10.14301/lcs.v9i1.450">https://doi.org/10.14301/lcs.v9i1.450</a></p> <p>Steinhoff, A., Bechtiger, L., Ribeaud, D., Eisner, M., &amp; Shanahan, L. (2020). Stressful life events in different social contexts are associated with self-injury from early adolescence to early adulthood. <i>Frontiers in Psychiatry</i>, 11, 1-16. <a href="https://doi.org/10.3389/fpsy.2020.487200">https://doi.org/10.3389/fpsy.2020.487200</a></p> <p>Shanahan, L., Steinhoff, A., Bechtiger, L., Murray, A., Nivette, A., Hepp, U., Ribeaud, D., &amp; Eisner, M. (2022). Emotional distress in young adults during the COVID-19 pandemic: Evidence of risk and resilience from a longitudinal cohort study. <i>Psychological Medicine</i>, 52, 824-833. <a href="https://doi.org/10.1017/S003329172000241X">https://doi.org/10.1017/S003329172000241X</a></p> <p>Ganschow, B.; Zebel, S.; van der Schalk, J.; Hershfield, H. E.; van Gelder, J.-L. (2023). Adolescent stressful life events predict future self-connectedness in adulthood. <i>The Journal of Early Adolescence</i>, advance online publication. <a href="https://doi.org/10.1177/02724316231216380">https://doi.org/10.1177/02724316231216380</a></p>



## 10 Leisure Activities / Media Use

### 10.1 Across the surveys

	Age 11 K4	Age 13 K5	Age 15 K6	Age 17 K7	Age 20 K8
<b>Leisure Activities / Media Use</b>					
Leisure activities	X	X	X	X	X
Media use	X	X	X	X	X
Bedtime	X	X	X	X	X

### 10.2 Leisure activities

#### 10.2.1 Overview

<b>Leisure activities</b>	
<b>Description</b>	This instrument assessed participants' indoor and outdoor activities during their leisure time. It was split into two different parts, one for activities at home, and one for activities outside of the home. Several of the items distinguished between daytime and nighttime activities. Besides providing a general overview of participants' leisure activities, the instrument also aimed at measuring how much time children spent doing creative activities and activities with their parents.
<b>Source/Developer</b>	z-proso Project Team, adapted from an instrument developed by the Kriminologisches Forschungsinstitut Niedersachsen (KFN):  Wetzels, P., Enzmann, D., Mecklenburg, E., & Pfeiffer, C. (2001). <i>Jugend und Gewalt. Eine repräsentative Dunkelfeldanalyse in München und acht anderen deutschen Städten</i> [Youth and Violence. A Representative Dark Number Study in Munich and Eight Other German Cities]. Baden-Baden, Germany: Nomos. <a href="https://repository.difu.de/jspui/handle/difu/278866">https://repository.difu.de/jspui/handle/difu/278866</a>
<b>Number of Items</b>	Varied per wave: 33 (K4), 40 (K5-7), 30 (K8)
<b>Response Categories</b>	5-point scale (from "never" to "(almost) every day") (activities at home) 6-point scale (from "never" to "(almost) every day") (activities outside of the home)
<b>Derived Constructs</b>	Two types of derived constructs: <b>Type 1 – Home activities (LEISHOME)</b> <i>Main constructs:</i> Creative activities (K4-7_LeisHomeCrea) Parent-oriented activities (K4-7_LeisHomePar) Play (K4-7_LeisHomePlay) <b>Type 2 – Activities outside of the home (LEISOUT)</b> <i>Main constructs:</i> Structured leisure activities (K4_LeisStruct4, K5-7_LeisStruct, K8_LeisStruct5) Unstructured leisure activities (K4_LeisUnstruct8, K5-7_LeisUnstruct, K8_LeisUnstruct10) Criminal leisure activities (K4_LeisCrim3, K5-8_LeisCrim) <i>Additional constructs:</i> Family centred activities (K4_leisure_family_centred) Creative or intellectual activities (K4_leisure_crea_intell) Sports (K4_leisure_sports) Delinquent activities (K4_leisure_delinquency) Unsupervised activities (K4_leisure_unsupervised) Leisure unsupervised activities, logarithmiert (K4_leisure_unsupervised_log) Activities with friends (K4_leisure_friends)

	Organised activities (K4_leisure_organised)
<b>Administration History</b>	K4-8
<b>Key Publications</b>	<p>Müller, B., Eisner, M., &amp; Ribeaud, D. (2013). Unstructured socializing and different types of early adolescent delinquency: Risk factor or selection effect? In: M. Eisner &amp; D. Ribeaud (Eds.), <i>Forschungsbericht aus der Reihe z-proso</i>, (Vol. 16). Zürich: ETH Zürich. <a href="https://doi.org/10.3929/ethz-a-010057631">https://doi.org/10.3929/ethz-a-010057631</a></p> <p>Defoe, I., van Gelder, J.-L., Ribeaud, D., &amp; Eisner, M. (2021). The co-development of friend delinquency with adolescent delinquency and short-term mindsets: The moderating role of co-offending. <i>Journal of Youth and Adolescence</i>, 50, 1601-1615. <a href="https://doi.org/10.1007/s10964-021-01417-z">https://doi.org/10.1007/s10964-021-01417-z</a></p>

## 10.3 Media use

### 10.3.1 Overview

<b>Media use</b>	
<b>Description</b>	Participants reported on their multimedia devices, their adult media consumption (adult action, horror, and porn movies or contents; adult computer games), their preferred computer games and TV shows, and the time they spent on media. The questions on the time spent on media distinguished between weekdays and Saturdays. Starting K5, the instrument also included questions about filming and sharing violent contents using one's cellphone.
<b>Source/Developer</b>	<p>z-proso Project Team; adapted from an instrument developed by the Kriminologische Forschungsstelle Niedersachsen (KFN):</p> <p>Wetzels, P., Enzmann, D., Mecklenburg, E., &amp; Pfeiffer, C. (2001). <i>Jugend und Gewalt. Eine repräsentative Dunkelfeldanalyse in München und acht anderen deutschen Städten</i> [Youth and Violence. A Representative Dark Number Study in Munich and Eight Other German Cities]. Baden-Baden, Germany: Nomos. <a href="https://repository.difu.de/jspui/handle/difu/278866">https://repository.difu.de/jspui/handle/difu/278866</a></p>
<b>Number of Items</b>	Varied per wave: 14 (K4), 18 (K5-6), 15 (K7), 8 (K8)
<b>Response Categories</b>	Varied per item. See below for details.
<b>Derived Constructs</b>	<p>Mean time spent on computer games (K4-7_tVidGame)</p> <p>Mean time spent on surfing/chatting (K4-7_tPCUse)</p> <p>Mean time watching TV/DVD (K4-7_tTV)</p> <p>Mean time spent on media use (PC, TV, Computer games; K4-7_tMedia)</p> <p>Time spent on media use (K4_time_mediause)</p> <p>Mean score adult media contents (porn, horror, violence; K5-8_MediaContent)</p>
<b>Administration History</b>	K4-8
<b>Key Publications</b>	<p>Nivette, A., Eisner, M., &amp; Ribeaud, D. (2017). Developmental predictors of violent extremist attitudes: A test of general strain theory. <i>Journal of Research in Crime and Delinquency</i>, 54(6), 755-790. <a href="https://doi.org/10.1177/0022427817699035">https://doi.org/10.1177/0022427817699035</a></p> <p>Zhu, X., Griffiths, H., Xiao, Z., Ribeaud, D., Eisner, M., Yang, Y., Murray, A. (2023). Trajectories of screen time across adolescence and their associations with adulthood mental health and behavioral outcomes. <i>Journal of Youth and Adolescence</i>, 52, 1433-1447. <a href="https://doi.org/10.1007/s10964-023-01782-x">https://doi.org/10.1007/s10964-023-01782-x</a></p>

## 10.5 Bedtime

### 10.5.1 Overview

<b>Bedtime</b>	
<b>Description</b>	This instrument asked about the time at which participants usually go to bed on a normal school- or workday as well as on weekends. In K8, the participants were also asked at what time they usually get up.
<b>Source/Developer</b>	z-proso Project Team, adapted from an instrument developed by the Kriminologisches Forschungsinstitut Niedersachsen (KFN): Wetzels, P., Enzmann, D., Mecklenburg, E., & Pfeiffer, C. (2001). <i>Jugend und Gewalt. Eine repräsentative Dunkelfeldanalyse in München und acht anderen deutschen Städten</i> [Youth and Violence. A Representative Dark Number Study in Munich and Eight Other German Cities]. Baden-Baden, Germany: Nomos. <a href="https://repository.difu.de/jspui/handle/difu/278866">https://repository.difu.de/jspui/handle/difu/278866</a>
<b>Number of Items</b>	2 (K4-7), 4 (K8)
<b>Response Categories</b>	Open answers (time), theoretically ranging from 00.00 to 23.59 The recoded variables (...r) use a decimal system (e.g., 16:45=16.75) AND if bedtime is after midnight, they add 24 (e.g., if bedtime is 2:30 a.m. the value in the r-variable will be 26.5)
<b>Derived Constructs</b>	<b>Bedtime:</b> - Average bedtime on a weekday (K4_1470r, K5-8_2550r) - Average bedtime on the weekend (K4_1475r, K5-8_2555r) - Average bedtime (K4-8_BedTime) <b>Wake-up time:</b> - Average wake-up time on a weekday (K8_2560r, K8_2560rdec) - Average wake-up time on the weekend (K8_2565r, K8_2565rdec)
<b>Administration History</b>	K4-8
<b>Key Publications</b>	None



# 11 Social Behaviour / Social Problem-Solving

## 11.1 Across the surveys

	Age 11 K4	Age 13 K5	Age 15 K6	Age 17 K7	Age 20 K8
<b>Social Behaviour / Social Problem-Solving</b>					
Social Behaviour (Social Behaviour Questionnaire)	X	X	X	X	X
Conflict coping	X	X	X	X	X
Vengeance					X
Social desirability	X	X	X	X	X

## 11.2 Social Behaviour (Social Behaviour Questionnaire)

### 11.2.1 Overview

#### Social Behaviour (Social Behaviour Questionnaire)

##### Description

The Social Behaviour Questionnaire (SBQ) comprehensively measured different areas of problem as well as prosocial behavior. It is a multi-informant instrument that was also administered to the parents and the teachers; those versions are described in the applicable parts of the z-proso documentation.

Through the years, z-proso has used two different versions of the SBQ: the child version for ages 7 through 9 (i.e., K1-3) and the youth/adult for ages 11 through 20 (i.e., K4-8). The first version used the "Tom & Tina" computer adaptation, which fit the needs of young children by using dichotomous answer categories (yes/no) including images of an imaginary child and asking the participant whether or not they sometime do what is shown. The gender of the child in the images (i.e., Tom or Tina) matched the gender of the participant. For a description of the SBQ at K1-3, please refer to the applicable documentation overview. The "Tom & Tina" instrumented was adapted for K4 for two reasons: First, there was a need for simultaneous measurement of the old and new SBQ in order to cross-validate the instrument (yet limited to the core dimensions of aggressive and prosocial behavior). Second, it needed to be adapted to the classroom setting with a paper-and-pencil questionnaire. In K4, the items were completed using the paper-and-pencil method. The pictures were projected on the wall of the classroom while a z-proso assistant read the question to the entire class. The items were read in Swiss German; both the German and Swiss German versions are included below. Thumbnails of the pictures helped to identify the items in the questionnaire where the participants could choose between the "yes" and the "no" answer options. Because the pictures showed only the male version (i.e., "Tom"), the girls were asked to imagine that "Tom" was "Tina". At K4, the "Tom & Tina" version was limited to the aggressive and prosocial behavior items because the "Tom & Tina" version was included at K4 only for methodological reasons, specifically to find out to what extent both versions of the SBQ measured the same concepts.

The second version used in the z-proso study was adapted to the increasing age of the children. It comprised a paper-and-pencil survey, included a 5-point scale and no longer used the images. The naming convention for these variables is nSBQ instead of SBQ. The difference between the nSBQ youth and the nSBQ adult version is that the items wordings were (again) adapted in the latter (e.g., changing from "children" or "adolescents" to the more general word "people").

In order to measure the compatibility of the two versions, both the youth/adult version and (part of) the child version were used in the K4 survey (differentiated by the naming convention of "SBQ" for the child version and "nSBQ" for the youth version).

To see which 20 items overlap between the "Tom and Tina" and the paper-and-pencil instruments (or the child, the teacher, and the parent surveys), please refer to the file "SBQ\_ItemOverview\_v8.2.xlsx" or later.

See chapter [18.4 Psychotic symptoms](#) for more variables in the same format and response scale as the SBQ variables. They were conducted in the same block as the SBQ.

##### Source/Developer

Social Behaviour Questionnaire (item wordings): Tremblay et al. (1991).

Tremblay, R. E., Loeber, R., Gagnon, C., Charlebois, P., Larivee, S., & LeBlanc, M. (1991). Disruptive boys with stable and unstable high fighting behavior patterns during junior elementary school. *Journal of Abnormal Child Psychology*, 19, 285-300. <https://doi.org/10.1007/BF00911232>

Child-friendly computer adaptation: z-proso Project Team (Murray et al, 2017, 2019).

Murray, A. L., Eisner, M., & Ribeaud, D. (2017). Can the Social Behavior Questionnaire help meet the need for dimensional, transdiagnostic measures of childhood and adolescent psychopathology?. *European Journal of Psychological Assessment*, 35, 674-679. <https://doi.org/10.1027/1015-5759/a000442>

	<p>Murray, A. L., Eisner, M., Obsuth, I., &amp; Ribeaud, D. (2019). Evaluating longitudinal invariance in dimensions of mental health across adolescence: An analysis of the Social Behavior Questionnaire. <i>Assessment, 26</i>(7), 1234–1245. <a href="https://doi.org/10.1177/1073191117721741">https://doi.org/10.1177/1073191117721741</a></p> <p>As compared to the original scale, the more recent version used in the z-proso study further allows assessing subtypes of aggression, such as indirect, reactive, and instrumental aggression.</p>
<b>Number of Items</b>	<p>Child version: 27 (K4) Youth/adult version: 32 (K4), 42 (K5-7), 55 (K8)</p>
<b>Response Categories</b>	<p>Child version: Dichotomous (yes/no) Youth/adult version: 5-point scale (from “never” to “very often”)</p>
<b>Derived Constructs</b>	<p>Prosocial behavior (K4_SBQ_PROSO, K4-8_nSBQ_PROSO, K5-8_nSBQ_PROSO10) Anxiety and depression (K4-8_nSBQ_ANXDEP, K5-8_nSBQ_ANXDEP5) ADHD symptoms (K5-8_nSBQ_ADHD, K8_nSBQ_ADHD9) Opposition/defiance (K4-8_nSBQ_OPAGGR) Indirect aggression (K4_SBQ_INDAGGR, K4-8_nSBQ_INDAGGR, K5-8_nSBQ_INDAGGR4) Aggression (K4_SBQ_AGGR, K4-8_nSBQ_AGGR, K4-6_nSBQ_AGGR12). Subtypes:   Reactive aggression (K4_SBQ_REAGGR, K4-8_nSBQ_REAGGR, K5-8_nSBQ_REAGGR4)   Physical aggression (K4_SBQ_PHYSAGGR, K4-8_nSBQ_PHYSAGGR)   Proactive aggression (K4_SBQ_PROAGGR, K4-8_nSBQ_PROAGGR, K5-8_nSBQ_PROAGGR4) Anger (K8_nSBQ_ANGR) Psychosis (K8_nSBQ_PSYCHOSIS) Oppositional aggression (against parents) (K4-8_nSBQ_OPAGGR) Opposition toward parents (K4-8_nSBQ_PAROPP) (in some documentation, this is called TeenODD) Overall behavioral score (K4-8_nSBQ_OBS) (the PROSO items were inverted prior to computation; OBS/OBS1 contains all SBQ subscales; OBS2 excludes ANXDEP and ADHD) For an overview on the different versions of the items and subscales, please refer to SBQ_ItemOverview_v8.2.xlsx</p>
<b>Administration History</b>	<p>K1-4 (child version), K4-8 (youth/adult version)</p>
<b>Key Publications</b>	<p>Obsuth, I., Eisner, M., Malti, T., &amp; Ribeaud, D. (2015). The developmental relation between aggressive behaviour and prosocial behaviour. A 5-year longitudinal study. <i>BMC Psychology, 3</i>(16). <a href="https://doi.org/10.1186/s40359-015-0073-4">https://doi.org/10.1186/s40359-015-0073-4</a></p> <p>Averdijk, M., Zirk, J., Ribeaud, D., &amp; Eisner, M. (2016). Long-term effects of two universal interventions on adolescent delinquency, substance use, and externalising behavior. <i>Journal of Experimental Criminology, 12</i>(1), 21-47. <a href="https://doi.org/10.1007/s11292-015-9249-4">https://doi.org/10.1007/s11292-015-9249-4</a></p> <p>Obsuth, I., Murray, A. L., Malti, T., Sulger, P., Ribeaud, D., &amp; Eisner, M. (2017). A non-bipartite propensity score analysis of the effects of teacher–student relationships on adolescent problem and prosocial behavior. <i>Journal of Youth and Adolescence, 46</i>(8), 1661–1687. <a href="https://doi.org/10.1007/s10964-016-0534-y">https://doi.org/10.1007/s10964-016-0534-y</a></p> <p>Murray et al., 2017, 2019 (see above)</p> <p>Murray, A., Booth, T., Obsuth, I., Zirk-Sadowski, J., Eisner, M., &amp; Ribeaud, D. (2018). Testing the exacerbation and attenuation hypotheses of the role of anxiety in the relation between ADHD and reactive/proactive aggression: A 10-year longitudinal study. <i>Psychiatry Research, 269</i>, 582–592. <a href="https://doi.org/10.1016/j.psychres.2018.08.120">https://doi.org/10.1016/j.psychres.2018.08.120</a></p> <p>Murray, A., Booth, T., Eisner, M., Obsuth, I., &amp; Ribeaud, D. (2019). Quantifying the strength of general factors in psychopathology: A comparison of CFA with maximum likelihood estimation, BSEM and ESEM/EFA bi-factor approaches. <i>Journal of Personality Assessment, 100</i>(6), 631-643. <a href="https://doi.org/10.1080/00223891.2018.1468338">https://doi.org/10.1080/00223891.2018.1468338</a></p> <p>Steinhoff, A., Bechtiger, L., Ribeaud, D., Eisner, M., &amp; Shanahan, L. (2020). Stressful life events in different social contexts are associated with self-injury from early adolescence to early adulthood. <i>Frontiers in Psychiatry, 11</i>, 1-16. <a href="https://doi.org/10.3389/fpsy.2020.487200">https://doi.org/10.3389/fpsy.2020.487200</a></p> <p>Murray, A., Obsuth, I., Speyer, L., McKenzie, K., Murray, G., Ribeaud, D., &amp; Eisner, M. (2021). Developmental cascades from aggression to internalizing problems via peer and teacher relationships from early to middle adolescence. <i>Journal of Youth and Adolescence, 50</i>, 663-673. <a href="https://doi.org/10.1007/s10964-021-01396-1">https://doi.org/10.1007/s10964-021-01396-1</a></p> <p>Murray, A., Zych, I., Ribeaud, D., &amp; Eisner, M. (2021). Developmental relations between ADHD symptoms and bullying perpetration and victimization in adolescence. <i>Aggressive Behavior, 47</i>(1), 58-68. <a href="https://doi.org/10.1002/ab.21930">https://doi.org/10.1002/ab.21930</a></p> <p>Speyer, L. G., Eisner, M., Ribeaud, D., Luciano, M., Auyeung, B. &amp; Murray, A. L. (2021). Developmental relations between internalising problems and ADHD in childhood: A symptom level perspective. <i>Research on Child and Adolescent Psychopathology, 49</i>, 1567–1579. <a href="https://doi.org/10.1007/s10802-021-00856-3">https://doi.org/10.1007/s10802-021-00856-3</a></p>

- Steinhoff, A., Ribeaud, D., Kupferschmid, S., Raible, N., Quednow, B., Hepp, U., Eisner, M., & Shanahan, L. (2021). Self-injury from early adolescence to early adulthood: Age-related course, recurrence, and services use in males and females from the community. *European Child & Adolescent Psychiatry*, 30, 937–951. <https://doi.org/10.1007/s00787-020-01573-w>
- Murray, A., Caye, A., McKenzie, K., Auyeung, B., Murray, G., Ribeaud, D., Freestone, M., Eisner, M. (2022). Reciprocal developmental relations between ADHD and anxiety in adolescence: A within-person longitudinal analysis of commonly co-occurring symptoms. *Journal of Attention Disorders*, 26(1), 109–118. <https://doi.org/10.1177/1087054720908333>
- Murray, A., Nivette, A., Obsuth, I., Hafetz Mirman, J., Mirman, D., Ribeaud, D., & Eisner, M. (2022). Gender differences in cross-informant discrepancies in aggressive and prosocial behaviour: A latent difference score analysis. *Psychological Assessment*, 34(5), 409–418. <https://doi.org/10.1037/pas0001091>
- Neaverson, A., Murray, A., Eisner, M., & Ribeaud, D. (2022). Disrupting the link between corporal punishment exposure and adolescent aggression: The role of teacher-child relationships. *Journal of Youth and Adolescence*, 51, 2265–2280. <https://doi.org/10.1007/s10964-022-01666-6>
- Raible-Destan, N., Stulz, N., Hepp, U., Ribeaud, D., Eisner, M., Steinhoff, A., Shanahan, L., Sell, A., & Kupferschmid, S. (2022). Self-rated physical attractiveness and its relation to psychological well-being across adolescence. *European Journal of Developmental Psychology*, 19(4), 528–546. <https://doi.org/10.1080/17405629.2021.1931104>
- Speyer, L. G., Eisner, M., Ribeaud, D., Luciano, M., Auyeung, B., & Murray, A. L. (2022). A symptom level perspective on reactive and proactive aggressive behaviours and ADHD symptoms in childhood. *Journal of Child Psychology and Psychiatry*, 63(9), 1017–1026. <https://doi.org/10.1111/jcpp.13556>
- Zhu, X., Griffiths, H., Eisner, M., Hepp, U., Ribeaud, D., & Murray, A. (2022). Developmental relations between bullying victimization and suicidal ideation in middle adolescence and emerging adulthood: Do internalizing problems and substance use mediate their links? *Journal of Youth and Adolescence*, 51(9), 1745–1759. <https://doi.org/10.1007/s10964-022-01630-4>
- Aristodemou, M., Kievit, R., Murray, A., Eisner, M., Ribeaud, D., Fried, E. (2023). Common cause vs. dynamic mutualism: an empirical comparison of two theories of psychopathology in two large longitudinal cohorts. *Clinical Psychological Science*, advance online publication. <https://doi.org/10.1177/21677026231162814>
- Silletti, F.; Iannello, N.; Ingoglia, S.; Inguglia, C.; Cassibba, R.; Eisner, M.; Ribeaud, D.; Musso, P. (2023). Do self-control and parental involvement promote prosociality and hinder internalizing problems? A four-wave longitudinal study from early to mid-to-late adolescence. *Journal of Early Adolescence*, advance online publication. <https://doi.org/10.1177/02724316231210250>
- Speyer, L.; Obsuth, I.; Eisner, M.; Ribeaud, D.; Murray, A. (2023). Does prosociality in early- to mid-adolescence protect against later development of antisocial behaviours? *Journal of Early Adolescence*, advance online publication. <https://doi.org/10.1177/02724316231210254>
- Steinhoff, A., Bechtiger, L., Ribeaud, D., Eisner, M. & Shanahan, L. (2023). Self-, other-, and dual-harm during adolescence: A prospective-longitudinal study of childhood risk factors and early adult correlates. *Psychological Medicine*, 53(9), 3995–4003. <https://doi.org/10.1017/S0033291722000666>
- Steinhoff, A., Ribeaud, D., Eisner, M., & Shanahan, L. (2023). Developmental trajectories of self-, other-, and dual-harm across adolescence: The role of relationships with peers and teachers. *Psychopathology*, 56(1-2), 138–147. <https://doi.org/10.1159/000525296>

## 11.3 Conflict coping

### 11.3.1 Overview

Conflict coping	
<b>Description</b>	Participants were given a list of possible reactions to a conflict situation and asked how often they act in that way when in a conflict situation. Items included aggressive and socially competent strategies for conflict coping. Contrary to previous waves (K1 and 3), no vignettes were used.
<b>Source/Developer</b>	Items from the Kriminologisches Forschungsinstitut Niedersachsen (KFN), adapted by z-proso Project Team: Wetzels, P., Enzmann, D., Mecklenburg, E., & Pfeiffer, C. (2001). <i>Jugend und Gewalt. Eine repräsentative Dunkelfeldanalyse in München und acht anderen deutschen Städten</i> [Youth and Violence. A Representative Dark Number Study in Munich and Eight Other German Cities]. Baden-Baden, Germany: Nomos. <a href="https://repository.difu.de/jspui/handle/difu/278866">https://repository.difu.de/jspui/handle/difu/278866</a>
<b>Number of Items</b>	8 (4 for aggressive conflict coping, 4 for competent conflict coping)

<b>Response Categories</b>	5-point scale (from “never” to “very often”)
<b>Derived Constructs</b>	Aggressive conflict coping (K4-8_ConfCopAggr) Competent conflict coping (K4-8_ConfCopComp)
<b>Administration History</b>	K4-8
<b>Key Publications</b>	Nivette, A., Eisner, M., & Ribeaud, D. (2017). Developmental predictors of violent extremist attitudes: A test of general strain theory. <i>Journal of Research in Crime and Delinquency</i> , 54(6), 755-790. <a href="https://doi.org/10.1177/0022427817699035">https://doi.org/10.1177/0022427817699035</a>

## 11.4 Vengeance

### 11.4.1 Overview

<b>Vengeance Scale</b>	
<b>Description</b>	This instrument assessed how open the participant is to ideas of revenge in general and to taking revenge on someone who has wronged them themselves.
<b>Source/Developer</b>	Five-item scale from Coelho et al. (2018), based on the original scale of Stuckless and Goranson (1992).  Coelho, G. L., Monteiro, R. P., Hanel, P. H., Vilar, R., Gouveia, V. V., & Maio, G. R. (2018). Psychometric parameters of an abbreviated vengeance scale across two countries. <i>Personality and Individual Differences</i> , 120, 185-192. <a href="https://doi.org/10.1016/j.paid.2017.08.042">https://doi.org/10.1016/j.paid.2017.08.042</a>  Stuckless, N., & Goranson, R. (1992). The vengeance scale: Development of a measure of attitudes toward revenge. <i>Journal of Social Behavior and Personality</i> , 7(1), 25. <a href="https://psycnet.apa.org/record/1992-33601-001">https://psycnet.apa.org/record/1992-33601-001</a>
<b>Number of Items</b>	5
<b>Response Categories</b>	5-point scale (from “strongly disagree” to “strongly agree”)
<b>Derived Constructs</b>	Vengeance (K8_Veng)
<b>Administration History</b>	K8
<b>Key Publications</b>	None

## 11.5 Social desirability

### 11.5.1 Overview

<b>Social Desirability Scale (K5-K9: single-item indicator)</b>	
<b>Description</b>	This instrument assessed the participants’ tendency toward social desirability.
<b>Source/Developer</b>	z-proso Project Team
<b>Number of Items</b>	Varied per wave: 3 (K4), 1 (K5-8)
<b>Response Categories</b>	4-point scale (from “fully untrue” to “fully true”)
<b>Derived Constructs</b>	Social desirability (K4_SocDes)
<b>Administration History</b>	K4-8
<b>Key Publications</b>	None



## 12 Delinquency, Substance Use, and Contact with the Police

### 12.1 Across the surveys

	Age 11 K4	Age 13 K5	Age 15 K6	Age 17 K7	Age 20 K8
<b>Delinquency, Substance Use, and Contact with the Police</b>					
Delinquency and related police contacts	X	X	X	X	X
Contact with the police as an offender	X				
Situational characteristics of assault	X	X	X	X	X
Political and religious violence					X
Substance use and related police contacts		X	X	X	X
Experiences with the police		X	X	X	

### 12.2 Delinquency and related police contacts

#### 12.2.1 Overview

<b>Delinquency and related police contacts</b>	
<b>Description</b>	<p>Participants reported on their experiences with committing crime in the past year. In K4, three items on substance use were included; these items were removed after K4 in favor of a more detailed assessment on substance use.</p> <p>The instrument included various types of delinquency. The types of delinquency that were covered varied between the waves. This was partly due to the changing age and, consequently, daily circumstances in which participants found themselves. For example, at K7, the item “theft at work” was included and in the longer run can be seen as the substitute for the item “theft at school”.</p> <p>For each type of crime, three questions were asked: (1) whether participants had committed it (prevalence); (2) if they had committed it: how often (incidence); and (3) if they had committed it: how often they had had contact with the police because of it. The third type of question was asked starting K5; for K4, a separate instrument asked about contact with the police because of delinquency. This instrument is covered in the paragraph after the current one.</p> <p>The final item in the battery was a filter question: those participants who reported to have assaulted and injured another person received follow-up questions on the circumstances of the assault. These follow-up questions are covered in a paragraph below.</p>
<b>Source/Developer</b>	<p>The delinquency scales developed by Lösel (1975) and the Criminological Research Institute of Lower Saxony (Wetzels et al., 2001) were evaluated by Eisner et al. (2000) and further developed for z-proso by Ribeaud and Eisner (2009).</p> <p>Eisner, M., Manzoni, P., &amp; Ribeaud, D. (2000). <i>Gewalterfahrungen von Jugendlichen. Opfererfahrungen und selbst berichtete Gewalt bei Schülerinnen und Schülern im Kanton Zürich</i>. Aarau: Sauerländer.</p> <p>Ribeaud, D., &amp; Eisner, M. (2009). <i>Entwicklung von Gewalterfahrungen Jugendlicher im Kanton Zürich</i>. Oberentfelden: Sauerländer. [see p.196 for an excerpt of the delinquency scale]</p> <p>Lösel, F. (1975). <i>Handlungskontrolle und Jugenddelinquenz</i>. Stuttgart: Enke.</p> <p>Wetzels, P., Enzmann, D., Mecklenburg, E., &amp; Pfeiffer, C. (2001). <i>Jugend und Gewalt. Eine repräsentative Dunkelfeldanalyse in München und acht anderen deutschen Städten</i> [Youth and Violence. A Representative Dark Number Study in Munich and Eight Other German Cities]. Baden-Baden, Germany: Nomos. <a href="https://repository.difu.de/jspui/handle/difu/278866">https://repository.difu.de/jspui/handle/difu/278866</a></p>
<b>Number of Items</b>	Varied per wave: 12 (K4), 19 (K5), 20 (K6), 21 (K7), 24 (K8)
<b>Response Categories</b>	Varied per item. See below for details.
<b>Derived Constructs</b>	<p>Different types of derived constructs (the numbers indicate the number of items in the scale; constructs with more than 20 items also include items from the bullying and/or substance use scale):</p> <p><b>Deviance</b></p> <p>Prevalence of deviance (K4-8_DevPre16_W4, K5-7_DevPre28, K5-7_DevPre19, K8_DevPre26, K8_DevPre17)</p>

Variety of deviance (K4-8\_DevVar16\_W4, K5-7\_DevVar28, K5-7\_DevVar19, K8\_DevVar26, K8\_DevVar17)

Incidence of deviance (K5-7\_DevLNInc19, K8\_DevLNInc17)

#### **Delinquency**

Prevalence of delinquency (K5-8\_DelPre14, K5-8\_DelPre8)

Variety of delinquency (K5-8\_DelVar14, K5-8\_DelVar8)

Incidence of delinquency (K5-8\_DelInc14, K5-8\_DelLNInc14, K5-8\_DelInc8)

#### **Theft**

Prevalence of theft (K5-9\_TheftPre6, K7-8\_TheftWoSc)

Variety of theft (K5-9\_TheftVar6, K7-8\_TheftWoScC, K8\_TheftWoScC2)

Incidence of theft (K5-9\_TheftInc6, K7-8\_TheftWoScB)

#### **Violence**

Prevalence of violence (K5-8\_ViolPre3, K6-8\_ViolPre4\_W6)

Variety of violence (K5-8\_ViolVar3, K6-8\_ViolVar4\_W6)

Incidence of violence (K5-8\_ViolInc3, K6-8\_ViolInc4\_W6)

#### **Police Contacts**

Prevalence of police contacts (K5-8\_PolicePrev)

Variety of police contacts (K5-8\_PoliceVar)

Incidence of police contacts (K5-8\_PoliceInc)

#### **Administration History**

K4-8

#### **Key Publications**

Van Gelder, J.-L., Averdijk, M., Eisner, M., & Ribeaud, D. (2015). Unpacking the victim-offender overlap. On role differentiation and socio-psychological characteristics. *Journal of Quantitative Criminology*, 31(4), 653–675. <https://doi.org/10.1007/s10940-014-9244-3>

Averdijk, M., Van Gelder, J. L., Eisner, M., & Ribeaud, D. (2016). Violence begets violence ... but how? A decision-making perspective on the victim-offender overlap. *Criminology*, 54(2), 282-306. <https://doi.org/10.1111/1745-9125.12102>

Averdijk, M., Zirk, J., Ribeaud, D., & Eisner, M. (2016). Long-term effects of two universal interventions on adolescent delinquency, substance use, and externalising behavior. *Journal of Experimental Criminology*, 12(1), 21-47. <https://doi.org/10.1007/s11292-015-9249-4>

Van Gelder, J.-L., Averdijk, M., Ribeaud, D., & Eisner, M. (2018). Punitive parenting and delinquency: The mediating role of short-term mindsets. *British Journal of Criminology*, 58, 644–666. <https://doi.org/10.1093/bjc/azx042>

Van Gelder, J.-L., Averdijk, M., Ribeaud, D., & Eisner, M. (2020). Sanctions, short-term mindsets and delinquency: Reverse causality in a sample of high school youth. *Legal and Criminological Psychology*, 25(2), 199-218. <https://doi.org/10.1111/lcrp.12170>

Defoe, I., van Gelder, J.-L., Ribeaud, D., & Eisner, M. (2021). The co-development of friend delinquency with adolescent delinquency and short-term mindsets: The moderating role of co-offending. *Journal of Youth and Adolescence*, 50, 1601-1615. <https://doi.org/10.1007/s10964-021-01417-z>

Huijsmans, T., Nivette, A., Eisner, M., & Ribeaud, D. (2021). Social influences, peer delinquency, and low self-control: An examination of time-varying and reciprocal effects on delinquency over adolescence. *European Journal of Criminology*, 18(2), 192-212. <https://doi.org/10.1177/1477370819838720>

Zych, I., Farrington, D., Eisner, M., & Ribeaud, D. (2021). Childhood explanatory factors for adolescent offending: A cross-national comparison based on official records in London, Pittsburgh and Zurich. *Journal of Life Course and Developmental Criminology*, 7, 308-330. <https://doi.org/10.1007/s40865-021-00167-71>

Murray, A., Nagin, D., Obsuth, I., Ribeaud, D., & Eisner, M. (2022). Young adulthood outcomes of joint mental health trajectories: A group-based trajectory model analysis of a 13-year longitudinal cohort study. *Child Psychiatry & Human Development*, 53, 1083-1096. <https://doi.org/10.1007/s10578-021-01193-8>

Obsuth, I., Murray, A., Knoll, M., Ribeaud, D., & Eisner, M. (2023). Teacher-student relationships in childhood as a protective factor against adolescent delinquency up to age 17 – a propensity score matching approach. *Crime and Delinquency*, 69(4), 727-755. <https://doi.org/10.1177/001112872111014153>

## 12.3 Contact with the police as an offender

### 12.3.1 Overview

<b>Contact with the police as an offender</b>	
<b>Description</b>	Participants reported whether or not they had had contact with the police because of delinquency. Whereas for K5 to 8, similar questions were integrated into the item battery on delinquency (see a previous paragraph), a separate, short instrument was included at K4.
<b>Source/Developer</b>	z-proso Project Team
<b>Number of Items</b>	2
<b>Response Categories</b>	Varied per item. See below for details.
<b>Derived Constructs</b>	Contact with the police
<b>Administration History</b>	K4
<b>Key Publications</b>	Van Gelder, J.-L., Averdijk, M., Ribeaud, D., & Eisner, M. (2020). Sanctions, short-term mindsets and delinquency: Reverse causality in a sample of high school youth. <i>Legal and Criminological Psychology</i> , 25(2), 199-218. <a href="https://doi.org/10.1111/lcrp.12170">https://doi.org/10.1111/lcrp.12170</a>

## 12.4 Situational characteristics of assault

### 12.4.1 Overview

<b>Situational characteristics of assault</b>	
<b>Description</b>	Participants who reported that they had committed assault with injury in the item battery on delinquency (see above, Delinquency and related police contacts) were subsequently asked a series of follow-up questions on the most recent assault with injury. Questions included, among others, the time and place of the assault, characteristics of the victim(s), motives, and substance and weapon use during the assault.
<b>Source/Developer</b>	z-proso Project Team
<b>Number of Items</b>	13
<b>Response Categories</b>	Varied per item. See below for details
<b>Derived Constructs</b>	Time Place Number of offenders Victim characteristics Motive Substance use Use of weapon Disclosure/reporting to authority figures
<b>Administration History</b>	K4-8
<b>Key Publications</b>	None

## 12.5 Political and religious violence

### 12.5.1 Overview

<b>Political and religious violence</b>	
<b>Description</b>	Participants were asked whether in the past year, they had engaged in a range of delinquent activities because of their political and religious beliefs.
<b>Source/Developer</b>	z-proso Project Team based on Pauwels and De Waele (2014) and Gavray et al. (2012). The two items on threatening (on the internet/on the street) were developed by the z-proso Project Team; other items from the original scale were dropped. In addition, the reference period and the item format

	(with the standard “aus politischer oder religiöser Überzeugung” at the beginning) were developed by the z-proso Project Team.
	De Waele, M. S., & Pauwels, L. (2014). Youth involvement in politically motivated violence: Why do social integration, perceived legitimacy, and perceived discrimination matter?. <i>International Journal of Conflict and Violence (IJCV)</i> , 8(1), 134-153. <a href="https://doi.org/10.4119/ijcv-3050">https://doi.org/10.4119/ijcv-3050</a>
	Gavray, C., Fournier, B., & Born, M. (2012). Non-conventional/illegal political participation of male and female youths. <i>Human Affairs</i> , 22(3), 405-418. <a href="https://doi.org/10.2478/s13374-012-0033-0">https://doi.org/10.2478/s13374-012-0033-0</a>
<b>Number of Items</b>	5
<b>Response Categories</b>	4-point scale (from “never” to “more than 5 times”)
<b>Derived Constructs</b>	Political and religious violence (K8_PolRelViol)
<b>Administration History</b>	K8
<b>Key Publications</b>	None

## 12.6 Substance use and related police contacts

### 12.6.1 Overview

<b>Substance use and related police contacts</b>	
<b>Description</b>	<p>Participants reported on their consumption of various substances in the past year. For each type of substance, four questions were asked: (1) whether the participant had ever consumed it; (2) the age at which s/he first consumed it; (3) how often s/he consumed it in the past 12 months; and (4) how often s/he had contact with the police because of it. The instrument was used starting K5; in K4, three questions about substance use were integrated in the item battery on delinquency and police contact.</p> <p>Separate items asked about alcohol consumption and binge drinking in the past 30 days.</p> <p>In K8, a separate item battery enquired about substance use in the past 3 months.</p>
<b>Source/Developer</b>	<p>Based on Wetzels et al. (2001). Further developed and extended to other substances by the z-proso Project Team.</p> <p>Wetzels, P., Enzmann, D., Mecklenburg, E., &amp; Pfeiffer, C. (2001). <i>Jugend und Gewalt. Eine repräsentative Dunkelfeldanalyse in München und acht anderen deutschen Städten</i> [Youth and Violence. A Representative Dark Number Study in Munich and Eight Other German Cities]. Baden-Baden, Germany: Nomos. <a href="https://repository.difu.de/jspui/handle/difu/278866">https://repository.difu.de/jspui/handle/difu/278866</a></p>
<b>Number of Items</b>	Varied per wave: 18 (K5), 32 (K6-7), 35 (K8)
<b>Response Categories</b>	Varied per item. See below for details.
<b>Derived Constructs</b>	<p>Different types of derived constructs:</p> <p><b>Tobacco</b></p> <p>Prevalence of tobacco consumption (K5-8_131x_12mp)</p> <p>Prevalence of daily tobacco consumption (K5-8_1313_day)</p> <p>Prevalence of weekly tobacco consumption (K5-8_1313_wk)</p> <p><b>Alcohol</b></p> <p>Prevalence of beer/wine consumption (K5-8_132x_12mp)</p> <p>Prevalence of liquor consumption (K5-8_133x_12mp)</p> <p>Prevalence of alcohol consumption (K5-8_13x1alc)</p> <p>Age at which first consumed alcohol (K5-8_13x2alc)</p> <p>Incidence of alcohol consumption in the past 12 months (K5-8_13x3alc)</p> <p>Incidence of police contacts because of alcohol consumption (K5-8_13x4alc)</p> <p>Prevalence of weekly alcohol use (K5-8_13x3alc_wk)</p> <p>Prevalence of monthly alcohol use (K5-8_13x3alc_mth)</p> <p>Prevalence of binge drinking in the past 30 days (K5-8_1371a_30dp)</p> <p>Prevalence of anterograde amnesia (K5-8_1371b_30dp)</p> <p><b>THC</b></p> <p>Prevalence of THC consumption (K5-8_134x_12mp)</p> <p>Prevalence of weekly THC consumption (K5-8_1343_wk)</p> <p>Prevalence of monthly THC consumption (K5-8_1343_mth)</p> <p><b>Drugs</b></p> <p>Prevalence of XTC consumption (K6-8_n136x_12mp)</p> <p>Prevalence of (met-)amphetamine consumption (K6-8_n137x_12mp)</p>

Prevalence of cocaine consumption (K6-8\_n138x\_12mp)  
 Prevalence of LSD, psilocybin consumption (K6-8\_n139x\_12mp)  
 Prevalence of anabolic steroids consumption (K6-8\_n140x\_12mp)  
 Prevalence of cannabidiol consumption (K8\_n141x\_12mp)  
 Prevalence of cannabis substitutes consumption (K8\_n142x\_12mp)  
 Prevalence of 2C drugs consumption (K8\_n143x\_12mp)  
 Prevalence of ketamine consumption (K8\_n144x\_12mp)  
 Prevalence of heroin consumption (K8\_n145x\_12mp)  
 Prevalence of cough syrup, pastilles, drops with codeine consumption (K8\_n146x\_12mp)  
 Prevalence of opiate painkillers consumption (K8\_n147x\_12mp)  
 Prevalence of tranquilizer with benzodiazepines consumption (K8\_n148x\_12mp)  
 Prevalence of hard drugs consumption (K7-8\_n13hard\_12mp)

#### Substance Use Overall

Average frequency of substance use in the past 12 months (alcohol, tobacco, THC) (K5-8\_SubstUse\_AvFreq)  
 Average frequency of substance use in the past 12 months (8 substances) (K6-8\_SubstUse8\_AvFreq)  
 Variety of substance use in the past 12 months (alcohol, tobacco, THC) (K5-8\_SubstUse\_Var12m)  
 Variety of substance use in the past 12 months (8 substances) (K6-8\_SubstUse8\_Var12m)

#### Administration History

K5-8

#### Key Publications

- Averdijk, M., Zirk, J., Ribeaud, D., & Eisner, M. (2016). Long-term effects of two universal interventions on adolescent delinquency, substance use, and externalising behavior. *Journal of Experimental Criminology*, 12(1), 21–47. <https://doi.org/10.1007/s11292-015-9249-4>
- Murray, A., Eisner, M., Obsuth, I., & Ribeaud, D. (2017). No evidence that substance use causes ADHD symptoms in adolescence. *Journal of Drug Issues*, 47(3), 405–410. <https://doi.org/10.1177/0022042617697018>
- Shanahan, L., Steinhoff, A., Bechtiger, L., Copeland, W. E., Ribeaud, D., Eisner, M., & Quednow, B. (2021). Frequent teenage cannabis use: Prevalence across adolescence and associations with young adult psychopathology and functional well-being in an urban cohort. *Drug and Alcohol Dependence*, 228, 109063. <https://doi.org/10.1016/j.drugalcdep.2021.109063>
- Averdijk, M., Ribeaud, D., & Eisner, M. (2022). External childcare and socio-behavioral development in Switzerland: Long-term relations from childhood into young adulthood. *PLOS ONE*, 17(3), e0263571. <https://doi.org/10.1371/journal.pone.0263571>
- Quednow, B., Steinhoff, A., Bechtiger, L., Ribeaud, D., Eisner, M., & Shanahan, L. (2022). High prevalence and early onsets: Legal and illegal substance use in an urban cohort of young adults in Switzerland. *European Addiction Research*, 28, 186-198. <https://doi.org/10.1159/000520178>
- Steinhoff, A., Bechtiger, L., Ribeaud, D., Eisner, M., Quednow, B., & Shanahan, L. (2022). Polysubstance use in early adulthood: Patterns and developmental precursors in an urban cohort. *Frontiers in Behavioral Neuroscience*. 15: 797473. <https://doi.org/10.3389/fnbeh.2021.797473>
- Zhu, X., Griffiths, H., Eisner, M., Hepp, U., Ribeaud, D., & Murray, A. (2022). Developmental relations between bullying victimization and suicidal ideation in middle adolescence and emerging adulthood: Do internalizing problems and substance use mediate their links? *Journal of Youth and Adolescence*, 51(9), 1745–1759. <https://doi.org/10.1007/s10964-022-01630-4>
- Rodriguez-Ruiz, J., Zych, I., Ribeaud, D., Steinhoff, A., Eisner, M., Quednow, B., & Shanahan, L. (2023). The influence of different dimensions of the parent-child relationship in childhood as longitudinal predictors of substance use in late adolescence. The mediating role of self-control. *International Journal of Mental Health and Addiction*, advance online publication. <https://doi.org/10.1007/s11469-023-01036-8>
- Steinhoff, A., Shanahan, L., Bechtiger, L., Zimmermann, J., Ribeaud, D., Eisner, M., Baumgartner, M., & Quednow, B. (2023). When substance use is underreported: comparing self-reports and hair toxicology in an urban cohort of young adults. *Journal of the American Academy of Child and Adolescent Psychiatry*, 62(7), 791-804. <https://doi.org/10.1016/j.jaac.2022.11.011>
- Vock, F.; Johnson-Ferguson, L.; Bechtiger, L.; Stulz, N.; von Felten, J.; Eisner, M.; Hepp, U.; Ribeaud, D.; Shanahan, L.; Quednow, B. (2023). Substance use in sexual minority youth: prevalence in an urban cohort. *Child and Adolescent Psychiatry and Mental Health*, 17, 109. <https://doi.org/10.1186/s13034-023-00657-0>

## 12.7 Experiences with the police

### 12.7.1 Overview

<b>Experiences with the police</b>	
<b>Description</b>	<p>Participants reported on their experiences of contact with the police in the past two years. Questions pertained to the type of contact, the circumstances of it, the consequences, and (in K7 only) the participants' opinions about the police's actions.</p> <p>Contact with the police was also assessed in other item batteries, namely the life event calendar and the delinquency and substance use batteries. The current instrument is different in that it does not just include contact with the police as an offender, but also in other roles, e.g., as witness and victim.</p>
<b>Source/Developer</b>	z-proso Project Team
<b>Number of Items</b>	Varied per wave: 7 (K5-6), 10 (K7)
<b>Response Categories</b>	Varied per item. See below for details.
<b>Derived Constructs</b>	<p>Prevalence of contact with the police</p> <p>Reasons for contact with the police</p> <p>Consequences of contact with the police</p> <p>Opinion about treatment by the police (K7 only)</p>
<b>Administration History</b>	K5-7
<b>Key Publications</b>	None

## 13 Legal Attitudes

### 13.1 Across the surveys

	Age 11 K4	Age 13 K5	Age 15 K6	Age 17 K7	Age 20 K8
<b>Legal Attitudes</b>					
Legal cynicism		X	X	X	X
Police legitimacy			X	X	X
Justice sensitivity					X
Cooperation with the police and courts					X

### 13.2 Legal cynicism

#### 13.2.1 Overview

<b>Legal Cynicism Scale</b>	
<b>Description</b>	This instrument assessed participants' belief in the legitimacy and binding value of rules and laws and the extent to which participants feel that rules and laws apply to them and should be obeyed.
<b>Source/Developer</b>	The items were adapted from Karstedt and Farrall (2006) and Sampson and Bartusch (1998). Karstedt, S., & Farrall, S. (2006). The moral economy of everyday crime: Markets, consumers and citizens. <i>British Journal of Criminology</i> , 46(6), 1011–1036. <a href="https://doi.org/10.1093/bjc/azl082">https://doi.org/10.1093/bjc/azl082</a> Sampson, R. J., & Bartusch, D. J. (1998). Legal cynicism and (subcultural?) tolerance of deviance: The neighborhood context of racial differences. <i>Law &amp; Society Review</i> , 32(4), 777–804. <a href="https://doi.org/10.2307/827739">https://doi.org/10.2307/827739</a>
<b>Number of Items</b>	6
<b>Response Categories</b>	4-point scale (from “fully untrue” to “fully true”)
<b>Derived Constructs</b>	Legal cynicism (K5-8_LegCyn)
<b>Administration History</b>	K5-8
<b>Key Publications</b>	Nivette, A. E., Eisner, M., Malti, T., & Ribeaud, D. (2015). The social and developmental antecedents of legal cynicism. <i>Journal of Research in Crime and Delinquency</i> , 52(2), 270-298. <a href="https://doi.org/10.1177/0022427814557038">https://doi.org/10.1177/0022427814557038</a> Nivette, A., Eisner, M., & Ribeaud, D. (2017). Developmental predictors of violent extremist attitudes: A test of general strain theory. <i>Journal of Research in Crime and Delinquency</i> , 54(6), 755-790. <a href="https://doi.org/10.1177/0022427817699035">https://doi.org/10.1177/0022427817699035</a> Nivette, A., Eisner, M., & Ribeaud, D. (2020). Evaluating the shared and unique predictors of legal cynicism and police legitimacy from adolescence into early adulthood. <i>Criminology</i> , 58(1), 70-100. <a href="https://doi.org/10.1111/1745-9125.12230">https://doi.org/10.1111/1745-9125.12230</a> Nivette, A., Trajtenberg, N., Eisner, M., Ribeaud, D., & Tourinho Peres, M. F. (2020). Assessing the measurement invariance and antecedents of legal cynicism in São Paulo, Zurich, and Montevideo. <i>Journal of Adolescence</i> , 83, 83-94. <a href="https://doi.org/10.1016/j.adolescence.2020.06.007">https://doi.org/10.1016/j.adolescence.2020.06.007</a>

### 13.3 Police legitimacy

#### 13.3.1 Overview

<b>Police Legitimacy Scale</b>	
<b>Description</b>	Three dimensions of police performance were measured. Participants reported their perceptions of: (1) procedural fairness (i.e., respect of police toward citizens); (2) confidence in police effectiveness; and (3) fairness in police decision making (i.e., applying the law equally to all people).
<b>Source/Developer</b>	Three items were drawn from Sunshine and Tyler (2003). Sunshine, J., & Tyler, T. R. (2003). The role of procedural justice and legitimacy in shaping public support for policing. <i>Law &amp; Society Review</i> , 37(3), 513– 548. <a href="https://doi.org/10.1111/1540-5893.3703002">https://doi.org/10.1111/1540-5893.3703002</a>

<b>Number of Items</b>	3
<b>Response Categories</b>	4-point scale (from “fully untrue” to “fully true”)
<b>Derived Constructs</b>	Police legitimacy (K6-8_PolLeg)
<b>Administration History</b>	K6-8
<b>Key Publications</b>	<p>Nivette, A., Eisner, M., &amp; Ribeaud, D. (2020). Evaluating the shared and unique predictors of legal cynicism and police legitimacy from adolescence into early adulthood. <i>Criminology</i>, 58(1), 70-100. <a href="https://doi.org/10.1111/1745-9125.12230">https://doi.org/10.1111/1745-9125.12230</a></p> <p>Nivette, A., Obsuth, I., Ribeaud, D., &amp; Eisner, M. (2022). Fair teachers, fair police? Assessing the quasi-causal pathways between perceptions of teacher and police authority in childhood and adolescence. <i>Journal of Youth and Adolescence</i>, 51, 193–207. <a href="https://doi.org/10.1007/s10964-021-01537-6">https://doi.org/10.1007/s10964-021-01537-6</a></p>

## 13.4 Justice sensitivity

### 13.4.1 Overview

<b>Justice Sensitivity Scale</b>	
<b>Description</b>	This instrument assessed participants’ tolerance for moral norm violations and situations of injustice. Different types of situations were included: (1) situations that brought advantages to others but disadvantages to the participant; (2) situations in which others were treated unfairly; (3) situations that brought disadvantages to others but advantages to the participant; and (4) situations in which the participant treated someone else unfairly.
<b>Source/Developer</b>	<p>The original instrument was developed by Schmitt et al. (2005). z-proso used the abbreviated version by Baumert et al. (2014).</p> <p>Baumert, A., Beierlein, C., Schmitt, M., Kemper, C. J., Kovaleva, A., Liebig, S., &amp; Rammstedt, B., (2014). Measuring four perspectives of justice sensitivity with two items each. <i>Journal of Personality Assessment</i>, 96(3), 380-390. <a href="https://doi.org/10.1080/00223891.2013.836526">https://doi.org/10.1080/00223891.2013.836526</a></p> <p>Schmitt, M., Gollwitzer, M., Maes, J., &amp; Arbach, D. (2005). Justice sensitivity: Assessment and location in the personality space. <i>European Journal of Psychological Assessment</i>, 21, 202-211. <a href="https://doi.org/10.1027/1015-5759.21.3.202">https://doi.org/10.1027/1015-5759.21.3.202</a></p>
<b>Number of Items</b>	8
<b>Response Categories</b>	6-point scale (from “not true at all” to “completely true”)
<b>Derived Constructs</b>	<p>Justice sensitivity victim (K8_JustSenVict)</p> <p>Justice sensitivity observer (K8_JustSenObs)</p> <p>Justice sensitivity beneficiary (K8_JustSenBenef)</p> <p>Justice sensitivity perpetrator (K8_JustSenPerp)</p> <p>Justice sensitivity full inventory (K8_JustSenAll)</p>
<b>Administration History</b>	K8
<b>Key Publications</b>	None

## 13.5 Cooperation with the police and courts

### 13.5.1 Overview

<b>Cooperativeness with the Police Scale</b>	
<b>Description</b>	Against a procedural justice background, this instrument was included to measure participants’ trust, support, and opinion of the police and courts. Respondents were asked to imagine being the witness to a robbery. In order to measure their cooperation with the police and courts, they were subsequently asked several follow-up questions pertaining to the extent to which they would cooperate with police and legal procedures.
<b>Source/Developer</b>	European Social Survey (2011). <i>Round 5 Module on Trust in the Police &amp; Courts – Final Question Design Template</i> . London: Centre for Comparative Social Surveys: City University London. pp. 27-28



	<a href="https://www.europeansocialsurvey.org/docs/round5/questionnaire/ESS5_final_trust_in_police_courts_module_template.pdf">https://www.europeansocialsurvey.org/docs/round5/questionnaire/ESS5_final_trust_in_police_courts_module_template.pdf</a>
<b>Number of Items</b>	3
<b>Response Categories</b>	Varied per item. See below for details.
<b>Derived Constructs</b>	Cooperativeness with the police (K8_CoopPol)
<b>Administration History</b>	K8
<b>Key Publications</b>	None



## 14 Attitudes toward Crime and Violence

### 14.1 Across the surveys

	Age 11 K4	Age 13 K5	Age 15 K6	Age 17 K7	Age 20 K8
<b>Attitudes toward Crime and Violence</b>					
Legitimacy of use of violence					X
Legitimacy of violence against women			X	X	X
Violence legitimising norms of masculinity		X	X	X	X
Violent ideations			X	X	X
Violent extremist attitudes				X	X
Moral judgment		X	X	X	X
Decision making	X	X	X	X	X
Moral neutralization of violence	X	X	X	X	X
Shame and guilt		X	X	X	X

### 14.2 Legitimacy of use of violence

#### 14.2.1 Overview

<b>Legitimacy of Use of Violence Scale</b>	
<b>Description</b>	This instrument measured how likely participants were to legitimise the use of violence. Participants were provided with four different situations and asked how wrong or right they thought the use of violence in that particular situation would be.
<b>Source/Developer</b>	Jackson, J., Huq, A. Z., Bradford, B., & Tyler, T. R. (2013). Monopolizing force? Police legitimacy and public attitudes toward the acceptability of violence. <i>Psychology, Public Policy, and Law</i> , 19(4), 479–497. <a href="https://doi.org/10.1037/a0033852">https://doi.org/10.1037/a0033852</a>
<b>Number of Items</b>	4
<b>Response Categories</b>	5-point scale (from “completely wrong” to “totally right”)
<b>Derived Constructs</b>	Legitimacy of use of violence (K8_LegUseViol)
<b>Administration History</b>	K8
<b>Key Publications</b>	None

### 14.3 Legitimacy of violence against women

#### 14.3.1 Overview

<b>Legitimation of Violence against Women Scale</b>	
<b>Description</b>	Participants were presented with a number of statements pertaining to the use of violence against women. They were asked to indicate the extent to which they agreed with the statements.
<b>Source/Developer</b>	z-proso Project Team, adapted from Saunders et al. (1987). Saunders, D. G., Lynch, A. B., Grayson, M., & Linz, D. (1987). The inventory of beliefs about wife beating: The construction and initial validation of a measure of beliefs and attitudes. <i>Violence and Victims</i> , 2(1), 39-57. doi: 10.1891/0886-6708.2.1.39
<b>Number of Items</b>	3
<b>Response Categories</b>	4-point scale (from „fully untrue” to “fully true”)
<b>Derived Constructs</b>	Attitudes toward violence against women (K6-8_ViolWom3)
<b>Administration History</b>	K6-8
<b>Key Publications</b>	Schuster, I., Tomaszewska, P., Gul, P., Ribeaud, D., & Eisner, M. (2021). The role of moral neutralization of aggression and justification of violence against women in predicting physical teen dating violence perpetration and monitoring among adolescents in Switzerland. <i>New Directions for</i>

*Child and Adolescent Development*, 178 (Special Issue: Prevalence and Predictors of Teen Dating Violence: A European Perspective), 115-131. <https://doi.org/10.1002/cad.20430>

## 14.4 Violence legitimising norms of masculinity

### 14.4.1 Overview

<b>Violence-Legitimising Norms of Masculinity Scale</b>	
<b>Description</b>	Participants were presented with a number of statements pertaining to the use of violence by men as a necessary means to defend themselves or those around them. Participants were asked to indicate the extent to which they agreed with the statements.
<b>Source/Developer</b>	z-proso Project Team, adapted from Enzmann et al. (2004): Enzmann, D., Brettfeld, K., & Wetzels, P.: Männlichkeitsnormen und die Kultur der Ehre. Empirische Prüfung eines theoretischen Modells zur Erklärung erhöhter Delinquenzraten jugendlicher Migranten. <i>Soziologie der Kriminalität</i> , 264-287. Enzmann et al. were inspired by Nisbett and Cohen (1996): Nisbett, R. E., & Cohen, D. (1996). Culture of honor: the psychology of violence in the South. New directions insocial psychology. <i>Westview Press</i> , Boulder. <a href="https://www.ojp.gov/njrs/virtual-library/abstracts/culture-honor-psychology-violence-south">https://www.ojp.gov/njrs/virtual-library/abstracts/culture-honor-psychology-violence-south</a>
<b>Number of Items</b>	3
<b>Response Categories</b>	4-point scale (from „fully untrue“ to “fully true“)
<b>Derived Constructs</b>	Violence legitimising norms of masculinity (K8_NormMasc3)
<b>Administration History</b>	K4-8
<b>Key Publications</b>	None

## 14.5 Violent ideations

### 14.5.1 Overview

<b>Violent Ideations Scale</b>	
<b>Description</b>	This instrument measured the participant’s thoughts about using violence against themselves (suicidal ideation) and others (violent and homicidal ideation). Items included ideations about physical violence, sexual violence, and homicide. Violent ideation was also assessed in another item battery, namely the decision making instrument. The current instrument is different in that it includes a wider variety of ideations.
<b>Source/Developer</b>	z-proso Project Team: Murray, A. L., Eisner, M., & Ribeaud, D. (2018). Development and validation of a brief measure of violent thoughts: The Violent Ideations Scale (VIS). <i>Assessment</i> , 25(7), 942-955. <a href="https://doi.org/10.1177/1073191116667213">https://doi.org/10.1177/1073191116667213</a> Urruela, C., Booth, T., Eisner, M., Ribeaud, D., & Murray, A. L. (2023). Validation of an extended violent ideations scale to measure both non-sexual and sexual violent ideations (The VIS-X). <i>European Journal of Psychological Assessment</i> , 39(3), 157-164. <a href="https://doi.org/10.1027/1015-5759/a000698">https://doi.org/10.1027/1015-5759/a000698</a>
<b>Number of Items</b>	Varied per wave: 2 (K6), 15 (K7), 17 (K8)
<b>Response Categories</b>	5-point scale (from „never“ to “very often“)
<b>Derived Constructs</b>	Violent ideation (K6-7_ViolIdea4, K7-8_ViolIdea12) Violent sexual ideation (K7-8_ViolSexIdea2, K8_ViolSexIdea4)
<b>Administration History</b>	K6-8
<b>Key Publications</b>	Murray, A., Eisner, M., Obsuth, I., & Ribeaud, D. (2017). Situating violent ideations within the landscape of mental health: Associations between violent ideations and dimensions of mental health. <i>Psychiatry Research</i> , 249, 70–77. <a href="https://doi.org/10.1016/j.psychres.2017.01.005">https://doi.org/10.1016/j.psychres.2017.01.005</a> Murray et al. (2018): see above. Eisner, M., Averdijk, M., Kaiser, D., Murray, A. L., Nivette, A., Shanahan, L., Van Gelder, J. L., & Ribeaud, D. (2021). The association of polyvictimization with violent ideations in late adolescence

and early adulthood: A longitudinal study. *Aggressive behavior*, 47(4), 472-482.  
<https://doi.org/10.1002/ab.21965>

Garcia Nuñez, D., Raible-Destan, N., Hepp, U., Kupferschmid, S., Ribeaud, D., Steinhoff, A., Shanahan, L., Eisner, M., & Stulz, N. (2022). Suicidal ideation and self-injury in LGB youth: A longitudinal study from urban Switzerland. *BMC Child and Adolescent Psychiatry and Mental Health*, 16(21). <https://doi.org/10.1186/s13034-022-00450-5>

Raible-Destan, N., Stulz, N., Hepp, U., Ribeaud, D., Eisner, M., Steinhoff, A., Shanahan, L., Sell, A., & Kupferschmid, S. (2022). Self-rated physical attractiveness and its relation to psychological well-being across adolescence. *European Journal of Developmental Psychology*, 19(4), 528-546.  
<https://doi.org/10.1080/17405629.2021.1931104>

Zhu, X., Griffiths, H., Eisner, M., Hepp, U., Ribeaud, D., & Murray, A. (2022). Developmental associations between bullying victimization and suicidal ideation and direct self-injurious behavior in adolescence and early adulthood. *Journal of Child Psychology and Psychiatry*, 63(7), 820-828.  
<https://doi.org/10.1111/jcpp.13529>

Zhu, X., Griffiths, H., Eisner, M., Hepp, U., Ribeaud, D., & Murray, A. (2022). Developmental relations between bullying victimization and suicidal ideation in middle adolescence and emerging adulthood: Do internalizing problems and substance use mediate their links? *Journal of Youth and Adolescence*, 51(9), 1745-1759. <https://doi.org/10.1007/s10964-022-01630-4>

Urruela, C., Booth, T., Eisner, M., Ribeaud, D., & Murray, A. (2023). Validation of an extended violent ideations scale to measure both non-sexual and sexual violent ideations (The VIS-X). *European Journal of Psychological Assessment*, 39(3), 157-164. <https://doi.org/10.1027/1015-5759/a000698>

Urruela, C., Greco, A. M., Díaz-Faes, D. A., Zych, I., Pereda, N., Eisner, M., Ribeaud, D., & Murray, A. (2023). Validation of the Violent Ideations Scale (VIS) in Spain. *International Journal of Offender Therapy and Comparative Criminology*. <https://doi.org/10.1177/0306624X221148126>

## 14.6 Violent extremist attitudes

### 14.6.1 Overview

#### Violent Extremist Attitudes Scale

<b>Description</b>	This instrument measured generic support for violent extremism. Participants were presented with a number of statements pertaining to the use of violence for political, ideological, religious, social, or economic aims. They were asked to indicate the extent to which they agreed with the statements.
<b>Source/Developer</b>	z-proso Project Team: Nivette, A., Eisner, M., & Ribeaud, D. (2017). Developmental predictors of violent extremist attitudes: A test of general strain theory. <i>Journal of research in crime and delinquency</i> , 54(6), 755-790. <a href="https://doi.org/10.1177/0022427817699035">https://doi.org/10.1177/0022427817699035</a>
<b>Number of Items</b>	Varied per wave: 4 (K7), 7 (K8)
<b>Response Categories</b>	4-point scale (from „fully untrue“ to “fully true“)
<b>Derived Constructs</b>	Violent political radicalism (K7-8_ViolRadic) Violent left-wing radicalism (K8_ViolRadicLeft) Violent islamistic radicalism (K8_ViolRadicIslam) Violent right-wing radicalism (K8_ViolRadicRight)
<b>Administration History</b>	K7-8
<b>Key Publications</b>	Nivette et al. (2017): see above.  Nivette, A., Eisner, M., & Ribeaud, D. (2017). Developmental predictors of violent extremist attitudes: A test of general strain theory among a sample of Swiss youth. <i>Journal of Research in Crime and Delinquency</i> , 54(6), 755-790. <a href="https://doi.org/10.1177/0022427817699035">https://doi.org/10.1177/0022427817699035</a>  Ribeaud, D., Eisner, M., & Nivette, A. (2017). <i>Können gewaltbereite extremistische Einstellungen vorausgesagt werden?</i> Factsheet. Zürich: Universität Zürich, Jacobs Center for Productive Youth Development. <a href="https://www.jacobscenter.uzh.ch/dam/jcr:9fe0422c-8c72-4232-8f1f-4c8a82369c70/factsheet%20z-proso%202017-2%20de.pdf">https://www.jacobscenter.uzh.ch/dam/jcr:9fe0422c-8c72-4232-8f1f-4c8a82369c70/factsheet%20z-proso%202017-2%20de.pdf</a>  Ribeaud, D., Eisner, M., & Nivette, A. (2018). Extremistische Einstellungen unter Jugendlichen: Ergebnisse der Zürcher Längsschnittstudie z-proso [Extremist attitudes among youths: Results of the Zurich longitudinal study z-proso]. In: Schwarzenegger, C. & Nägeli, R. (Eds.), <i>Zehntes Zürcher Präventionsforum [Tenth Zurich Prevention Forum]</i> . Zürich: Schulthess Juristische Medien AG. <a href="https://www.zora.uzh.ch/id/eprint/166462/">https://www.zora.uzh.ch/id/eprint/166462/</a>

Nivette, A., Echelmeyer, L., Weermann, F., Eisner, M., & Ribeaud, D. (2022). Understanding changes in violent extremist attitudes during the transition to early adulthood. *Journal of Quantitative Criminology*, 38, 949-978. <https://doi.org/10.1007/s10940-021-09522-9>

## 14.7 Decision making

### 14.7.1 Overview

Decision making	
<b>Description</b>	Four vignettes, containing short descriptions of violent situations, were used to capture decision making characteristics. The vignettes described situations of theft (K4 only), physical violence, robbery, and verbal violence. Participants were asked to imagine that they committed the act in the described situations. Each vignette was followed by a series of items measuring different aspects of decision making. The vignettes were gender-matched in the sense that the story protagonist was male for male respondents and female for female respondents.
<b>Source/Developer</b>	z-proso Project Team, adapted from Wetzels et al. (2001) [situational vignette] and Huizinga and Esbensen (1990) [decision making questions].  Huizinga, D., & Esbensen, F. A. (1990). <i>Scales and Measures of the Denver Youth Survey</i> . Denver: Institute of Behavioral Science, University of Colorado.  Wetzels, P., Enzmann, D., Mecklenburg, E., & Pfeiffer, C. (2001). <i>Jugend und Gewalt. Eine repräsentative Dunkelfeldanalyse in München und acht anderen deutschen Städten</i> [Youth and Violence. A Representative Dark Number Study in Munich and Eight Other German Cities]. Baden-Baden, Germany: Nomos. <a href="https://repository.difu.de/jspui/handle/difu/278866">https://repository.difu.de/jspui/handle/difu/278866</a>
<b>Number of Items</b>	Varied per wave and vignette: 8 (theft vignette); 17 (verbal violence, K5-6), 9 (verbal violence, K7-8); 17 (robbery, K4-6), 10 (robbery, K7); 17 (physical violence, K4), 15 (physical violence, K5-6), 9 (physical violence, K7-8)
<b>Response Categories</b>	Varied per item. See below for details.
<b>Derived Constructs</b>	Violent ideation (K4_DM01_3, K4_DM01_2, K5-7_DecMak01) Positive feelings (K4_DM02_3, K4_DM02_2, K5-7_DecMak02) Perceived seriousness (K4_DM03_3, K4_DM03_2, K5-7_DecMak03, K4_DM05_2, K5-7_DecMak05, K4_DM08_3, K4_DM08_2, K5-7_DecMak08, K4_DM10_2, K5-7_DecMak10, K4_DM13_2, K5-6_DecMak13, K4_DM15_2, K5-6_DecMak15, K4_DM17_2, K5-6_DecMak17) Admiration by friends (K4_DM07_3, K4_DM07_2, K5-7_DecMak07) Shame with friends (K4_DM09_2, K5-7_DecMak09) Admiration by parents (K4_DM12_2, K5-6_DecMak12) Shame with parents (K4_DM14_2, K5-6_DecMak14) Risk of Retaliation (K4_DM04_2, K5-7_DecMak04) Find out (K4_DM06_3, K4_DM06_2, K5-7_DecMak06, K4_DM11_2, K5-6_DecMak11, K4_DM16_2, K5-6_DecMak16)
<b>Administration History</b>	K4-8
<b>Key Publications</b>	Averdijk, M., Van Gelder, J. L., Eisner, M., & Ribeaud, D. (2016). Violence begets violence ... but how? A decision-making perspective on the victim-offender overlap. <i>Criminology</i> , 54(2), 282-306. <a href="https://doi.org/10.1111/1745-9125.12102">https://doi.org/10.1111/1745-9125.12102</a>  Murray, A., Obsuth, I., Eisner, M., & Ribeaud, D. (2016). Shaping aggressive personality in adolescence. Exploring cross-lagged relations between aggressive thoughts, aggressive behaviour and self-control. <i>Personality and Individual Differences</i> , 97, 1-7. <a href="https://doi.org/10.1016/j.paid.2016.03.022">https://doi.org/10.1016/j.paid.2016.03.022</a>

## 14.8 Moral judgment

### 14.8.1 Overview

Moral Attitudes Scale	
<b>Description</b>	This instrument presented the participants with different behaviours and asked them to judge how wrong or right they believed that behaviour to be.
<b>Source/Developer</b>	Adapted from Wikström & Butterworth (2006), page 268, taken from a scale used in the Pittsburgh Youth Study (PYS):

	Wikström, P-O. H., & Butterworth, D. A. (2006). <i>Adolescent Crime</i> . London: Willan. doi: 10.4324/9781843925712
<b>Number of Items</b>	5
<b>Response Categories</b>	7-point Likert scale (from „not bad at all“ to „very bad“)
<b>Derived Constructs</b>	Moral judgment (K5-8_Moral)
<b>Administration History</b>	K5-8
<b>Key Publications</b>	Nivette, A., Obsuth, I., Ribeaud, D., & Eisner, M. (2022). Fair teachers, fair police? Assessing the quasi-causal pathways between perceptions of teacher and police authority in childhood and adolescence. <i>Journal of Youth and Adolescence</i> , 51, 193–207. <a href="https://doi.org/10.1007/s10964-021-01537-6">https://doi.org/10.1007/s10964-021-01537-6</a>

## 14.9 Moral neutralization of violence

### 14.9.1 Overview

<b>Moral Neutralization Scale</b>	
<b>Description</b>	This instrument measured how adolescents and young adults justified their criminal acts. It combined criminological theories (Sykes & Matza) with socio-psychological theories (Bandura). While conceiving the instrument, it became clear that the concepts addressed by the different theories were very similar and showed no differences when operationalised and factor analysed.
<b>Source/Developer</b>	z-proso Project Team adapted from:  Ribeaud, D., & Eisner, M. (2010). Are moral disengagement, neutralisation techniques and self-serving cognitive distortions the same? Development of a unified scale of moral neutralization of aggression. <i>International Journal of Conflict and Violence</i> , 4(2), 298-315. <a href="https://doi.org/10.4119/UNIBI/ijcv.92">https://doi.org/10.4119/UNIBI/ijcv.92</a>  Ribeaud, D. (2012). A Unified Measure of Moral Neutralization. An Addendum. In: Eisner, M., & Ribeaud, D. (Eds.), <i>Forschungsbericht aus der Reihe z-proso</i> , 15. Zürich: ETH Zürich. <a href="https://www.zora.uzh.ch/id/eprint/166527/">https://www.zora.uzh.ch/id/eprint/166527/</a>
<b>Number of Items</b>	Varied per wave: 16 (K4), 18 (K5-7), 12 (K8)
<b>Response Categories</b>	4-point scale (from “fully untrue” to “fully true”)
<b>Derived Constructs</b>	Moral neutralization (K4-7_MorNeutr, K5-7_MorNeutr18, K8_MorNeutr12)
<b>Administration History</b>	K4-8
<b>Key Publications</b>	Ribeaud, D., & Eisner, M. (2015). The nature of the association between moral neutralization and aggression: A systematic test of causality in early adolescence. <i>Merrill-Palmer Quarterly</i> , 61(1), 68-84. <a href="https://doi.org/10.13110/merrpalmquar1982.61.1.0068">https://doi.org/10.13110/merrpalmquar1982.61.1.0068</a>  Nivette, A., Eisner, M., & Ribeaud, D. (2017). Developmental predictors of violent extremist attitudes: A test of general strain theory. <i>Journal of Research in Crime and Delinquency</i> , 54(6), 755-790. <a href="https://doi.org/10.1177/0022427817699035">https://doi.org/10.1177/0022427817699035</a>  Schuster, I., Tomaszewska, P., Gul, P., Ribeaud, D., & Eisner, M. (2021). The role of moral neutralization of aggression and justification of violence against women in predicting physical teen dating violence perpetration and monitoring among adolescents in Switzerland. <i>New Directions for Child and Adolescent Development</i> , 178 (Special Issue: Prevalence and Predictors of Teen Dating Violence: A European Perspective), 115-131. <a href="https://doi.org/10.1002/cad.20430">https://doi.org/10.1002/cad.20430</a>

## 14.10 Shame and guilt

### 14.10.1 Overview

<b>Guilt and Shame Scale</b>	
<b>Description</b>	This instrument assessed whether the participant felt shame or guilt when doing something they believed to be wrong.
<b>Source/Developer</b>	Wikström, P-O. H., & Butterworth, D. A. (2006). <i>Adolescent Crime</i> . London: Willan. doi: 10.4324/9781843925712
<b>Number of Items</b>	3

<b>Response Categories</b>	4-point scale (from „fully untrue” to „fully true”)
<b>Derived Constructs</b>	Shame and guilt (K5-8_Shame)
<b>Administration History</b>	K5-8
<b>Key Publications</b>	None



## 15 Support / View of the Self / Resiliency

### 15.1 Across the surveys

	Age 11 K4	Age 13 K5	Age 15 K6	Age 17 K7	Age 20 K8
<b>Support / View of the Self / Resiliency</b>					
Social support by peers and adults		X	X	X	X
Self-efficacy			X	X	X
Professional counseling, support, and medication		X	X	X	X
Perception of the future self					X
Adult hope					X
Generalised trust		X	X	X	X
Perceived social exclusion		X			X

### 15.2 Social support by peers and adults

#### 15.2.1 Overview

<b>Social support by peers and adults</b>	
<b>Description</b>	Participants were asked questions about the extent to which they had people around them whom they could rely on in case of personal issues and whom they admired. This type of social support was conceptualized to be part of the participants' resiliency. Two different types of social support were included: (1) social support by peers (until K7); and (2) social support by adults.
<b>Source/Developer</b>	z-proso Project Team and Tina Malti
<b>Number of Items</b>	Varied per wave: 7 (K5-7), 4 (K8)
<b>Response Categories</b>	4-point scale (from „fully untrue“ to „fully true“)
<b>Derived Constructs</b>	Adult social support (K5-8_ResilAdult) Peer group social support (K5-7_ResilFriends)
<b>Administration History</b>	K5-8
<b>Key Publications</b>	Shanahan, L., Steinhoff, A., Bechtiger, L., Murray, A., Nivette, A., Hepp, U., Ribeaud, D., & Eisner, M. (2022). Emotional distress in young adults during the COVID-19 pandemic: Evidence of risk and resilience from a longitudinal cohort study. <i>Psychological Medicine</i> , 52, 824-833. <a href="https://doi.org/10.1017/S003329172000241X">https://doi.org/10.1017/S003329172000241X</a>

### 15.3 Self-efficacy

#### 15.3.1 Overview

<b>Self-Efficacy Scale</b>	
<b>Description</b>	Participants reported on several aspects of self-efficacy.
<b>Source/Developer</b>	Adapted from Schwarzer and Jerusalem (1999). The scale originally consisted of 10 items. Items 1 (“Wenn sich Widerstände auftun, finde ich Mittel und Wege, mich durchzusetzen”), 3 (“Es bereitet mir keine Schwierigkeiten, meine Absichten und Ziele zu verwirklichen”), 4 (“In unerwarteten Situationen weiß ich immer, wie ich mich verhalten soll”), 5 (“Auch bei überraschenden Ereignissen glaube ich, daß ich gut mit ihnen zurechtkommen kann”), and 7 (“Was auch immer passiert, ich werde schon klarkommen”) were adapted for z-proso.  Schwarzer, R., & Jerusalem, M. (Hrsg.) (1999). <i>Skalen zur Erfassung von Lehrer- und Schülermerkmalen. Dokumentation der psychometrischen Verfahren im Rahmen der Wissenschaftlichen Begleitung des Modellversuchs Selbstwirksame Schulen</i> . Berlin: Freie Universität Berlin. <a href="http://www.fu-berlin.de/gesund/">http://www.fu-berlin.de/gesund/</a>
<b>Number of Items</b>	5
<b>Response Categories</b>	4-point scale (from „fully untrue“ to „fully true“)

<b>Derived Constructs</b>	Self-efficacy (K6-8_SEffic)
<b>Administration History</b>	K6-8
<b>Key Publications</b>	None

## 15.4 Professional counseling, support, and medication

### 15.4.1 Overview

<b>Professional counseling, support, and medication</b>	
<b>Description</b>	<p>Participants reported whether they had visited a professional or taken medication for experienced problems. Depending on the wave of data collection (i.e., the participants' age), different types of support were included, such as (school) counsellors, (school) social workers, and (school) psychologists. For those participants who had received services from a professional or medication, follow-up questions asked about the timing and reason for the support.</p> <p>At K7/8 "school psychologist" was changed to "Beratungsstelle deiner Schule", and school "social worker" by "Jugendberatungsstelle" (because school psychological/social workers are only available during compulsory school)</p>
<b>Source/Developer</b>	z-proso Project Team
<b>Number of Items</b>	4
<b>Response Categories</b>	Varied per item. See below for details.
<b>Derived Constructs</b>	<p>Professional support (K5-6_ProfSup, K9_ProfSup, K5-6_ProfSup2, K7-8_ProfSupN, K7-8_ProfSupN2)</p> <p>Prevalence of antidepressant medication (K5_Antidepr_Medic24m, K5_Antidepr_MedicLT)</p> <p>Prevalence of ADHD medication (K5_ADHD_Medic24m, K5_ADHD_MedicLT)</p>
<b>Administration History</b>	K5-8
<b>Key Publications</b>	<p>Steinhoff, A., Ribeaud, D., Kupferschmid, S., Raible, N., Quednow, B., Hepp, U., Eisner, M., &amp; Shanahan, L. (2021). Self-injury from early adolescence to early adulthood: Age-related course, recurrence, and services use in males and females from the community. <i>European Child &amp; Adolescent Psychiatry</i>, 30, 937–951. <a href="https://doi.org/10.1007/s00787-020-01573-w">https://doi.org/10.1007/s00787-020-01573-w</a></p>

## 15.5 Perception of the future self

### 15.5.1 Overview

<b>Future Self Perception Scale</b>	
<b>Description</b>	<p>This instrument consisted of three parts. The first measured vividness of the future self by presenting the participants with three statements about their future self in 10 years' time. The second measured the level of connection between participants' past and future self through a future self-continuity scale where participants were shown a 7-point scale marked by two circles with increasing amounts of overlap. The third measured emotional future self-perception through expressive cartoon animations where participants depicted their feelings toward their future self in 10 years' time.</p> <p>For the first instrument, there was an error at K8: one category has been omitted in the questionnaire. Between "eher einverstanden" and "sehr einverstanden" we forgot to include "einverstanden", i.e. we used a 6- instead of a 7-point scale.</p>
<b>Source/Developer</b>	<p>For the first part of the instrument, three items were taken and adapted from Van Gelder et al. (2015). The future self-continuity scale was taken from Ersner-Hershfield et al. (2009). The expressive cartoon animations were based on Lang (1985).</p> <p>Van Gelder, J. L., Luciano, E. C., Weulen Kranenbarg, M., &amp; Hershfield, H. E. (2015). Friends with my future self: longitudinal vividness intervention reduces delinquency. <i>Criminology</i>, 53(2), 158-179. <a href="https://doi.org/10.1111/1745-9125.12064">https://doi.org/10.1111/1745-9125.12064</a></p> <p>Ersner-Hershfield, H., Garton, M. T., Ballard, K., Samanez-Larkin, G. R., &amp; Knutson, B. (2009). Don't stop thinking about tomorrow: Individual differences in future self-continuity account for saving. <i>Judgment and Decision Making</i>, 4(4), 280.</p>

	Lang, P. J. (1985). <i>The Cognitive Psychophysiology of Emotion: Anxiety and the Anxiety Disorders</i> . Hillsdale, NJ: Lawrence Erlbaum.
<b>Number of Items</b>	5
<b>Response Categories</b>	Varied per item. See below for details.
<b>Derived Constructs</b>	Vividness of the future self Future self-continuity Emotional future self-perception
<b>Administration History</b>	K8
<b>Key Publications</b>	Webb, Tangney, Eisner, E., Ribeaud, R., & van Gelder, J. L. (in preparation). Assessing a Paradox: A Preliminary Look at the Future Self in Suicidal Ideation. <i>Journal of Abnormal Psychology</i> .  Ganschow, B.; Zebel, S.; van der Schalk, J.; Hershfield, H. E.; van Gelder, J.-L. (2023). Adolescent stressful life events predict future self-connectedness in adulthood. <i>The Journal of Early Adolescence</i> , advance online publication. <a href="https://doi.org/10.1177/02724316231216380">https://doi.org/10.1177/02724316231216380</a>  Kübel, S., Deitzer, J., Frankenhuis, W., Ribeaud, D., Eisner, M., & van Gelder, J.-L. (2023). The shortsighted victim: Short-term mindsets mediate the link between victimization and later offending. <i>Journal of Criminal Justice</i> , 86, 102062. <a href="https://doi.org/10.1016/j.jcrimjus.2023.102062">https://doi.org/10.1016/j.jcrimjus.2023.102062</a>

## 15.6 Adult hope

### 15.6.1 Overview

<b>Desistance Scale (Adult Hope Scale)</b>	
<b>Description</b>	This instrument assessed the participants' hope and goals for their adult life, their sense of agency and success, and their resourcefulness and resilience.
<b>Source/Developer</b>	Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., Yoshinobu, L., Gibb, J., Langelle, C., & Harney, P. (1991). The will and the ways: Development and validation of an individual-differences measure of hope. <i>Journal of Personality and Social Psychology</i> , 60(4), 570–585. <a href="https://doi.org/10.1037/0022-3514.60.4.570">https://doi.org/10.1037/0022-3514.60.4.570</a>  Wandeler, C., Baeriswyl, F., & Shavelson, R. (2011). Hope, self-determination and workplace learning: A multilevel study in vocational training. <i>Swiss Journal of Educational Research</i> , 33(3), 421-442. <a href="https://doi.org/10.24452/sjer.33.3.4867">https://doi.org/10.24452/sjer.33.3.4867</a>
<b>Number of Items</b>	8
<b>Response Categories</b>	4-point scale (from „fully untrue“ to “fully true“)
<b>Derived Constructs</b>	Adult hope (K8_AHSfull) Adult hope – agency (K8_AHSagen) Adult hope – pathways (K8_AHSpath)
<b>Administration History</b>	K8
<b>Key Publications</b>	None

## 15.7 Generalised trust

### 15.7.1 Overview

<b>Generalised Trust Scale</b>	
<b>Description</b>	In order to measure feelings of trust, participants reported on the extent to which they found other people trustworthy, helpful, and fair.  Feelings of trust were also assessed at K2. The current instrument is different in that it does not use a sociometric approach like at K2, but regular questionnaire items.
<b>Source/Developer</b>	Adapted by the z-proso Project Team from the World Values Surveys using a different answer format.  Inglehart, R., Haerpfer, C., Moreno, A., Welzel, C., Kizilova, K., Diez-Medrano, J., Lagos, M., Norris, P., Ponarin, E., & Puranen, B. (Eds.) (2018). <i>World Values Survey: Round One - Country-Pooled Datafile</i> .

	Madrid, Spain & Vienna, Austria: JD Systems Institute & WWSA Secretariat. <a href="http://www.worldvaluessurvey.org/WVSDocumentationWV1.jsp">http://www.worldvaluessurvey.org/WVSDocumentationWV1.jsp</a> .
<b>Number of Items</b>	3
<b>Response Categories</b>	4-point scale (from „fully untrue“ to “fully true”)
<b>Derived Construct</b>	General Trust (K5-8_GTrust)
<b>Administration History</b>	K5-8
<b>Key Publications</b>	Nivette, A., Eisner, M., & Ribeaud, D. (2017). Developmental predictors of violent extremist attitudes: A test of general strain theory. <i>Journal of Research in Crime and Delinquency</i> , 54(6), 755-790. <a href="https://doi.org/10.1177/0022427817699035">https://doi.org/10.1177/0022427817699035</a>  Shanahan, L., Steinhoff, A., Bechtiger, L., Murray, A., Nivette, A., Hepp, U., Ribeaud, D., & Eisner, M. (2022). Emotional distress in young adults during the COVID-19 pandemic: Evidence of risk and resilience from a longitudinal cohort study. <i>Psychological Medicine</i> , 52, 824-833. <a href="https://doi.org/10.1017/S003329172000241X">https://doi.org/10.1017/S003329172000241X</a>

## 15.8 Perceived social exclusion

### 15.8.1 Overview

<b>Perceived Social Exclusion Scale</b>	
<b>Description</b>	Participants answered several questions pertaining to their perceived level of social exclusion.
<b>Source/Developer</b>	Bude, H., & Lantermann, E. D. (2006). Soziale Exklusion und Exklusionsempfinden. <i>Kölner Zeitschrift für Soziologie und Sozialpsychologie</i> , 58, 233–252. <a href="https://doi.org/10.1007/s11575-006-0054-1">https://doi.org/10.1007/s11575-006-0054-1</a>
<b>Number of Items</b>	Varied per wave: 7 (K5), 6 (K8) (Item K5_703 did not fit the scale well and was dropped in K8)
<b>Response Categories</b>	4-point Likert scale (from „fully untrue“ to „fully true”)
<b>Derived Constructs</b>	Perceived social exclusion (K5_Exclu; K8_Exclu6)
<b>Administration History</b>	K5&8
<b>Key Publications</b>	Nivette, A. E., Eisner, M., Malti, T., & Ribeaud, D. (2015). The social and developmental antecedents of legal cynicism. <i>Journal of Research in Crime and Delinquency</i> , 52(2), 270-298. <a href="https://doi.org/10.1177/0022427814557038">https://doi.org/10.1177/0022427814557038</a>  Shanahan, L., Steinhoff, A., Bechtiger, L., Murray, A., Nivette, A., Hepp, U., Ribeaud, D., & Eisner, M. (2022). Emotional distress in young adults during the COVID-19 pandemic: Evidence of risk and resilience from a longitudinal cohort study. <i>Psychological Medicine</i> , 52, 824-833. <a href="https://doi.org/10.1017/S003329172000241X">https://doi.org/10.1017/S003329172000241X</a>  Murray, A., Nagin, D., Obsuth, I., Ribeaud, D., & Eisner, M. (2022). Young adulthood outcomes of joint mental health trajectories: A group-based trajectory model analysis of a 13-year longitudinal cohort study. <i>Child Psychiatry &amp; Human Development</i> , 53, 1083-1096. <a href="https://doi.org/10.1007/s10578-021-01193-8">https://doi.org/10.1007/s10578-021-01193-8</a>

## 16 Peers / Friends / Romantic Partners

### 16.1 Across the surveys

	Age 11 K4	Age 13 K5	Age 15 K6	Age 17 K7	Age 20 K8
<b>Peers / Friends / Romantic Partners</b>					
Group and gang membership		X	X	X	X
Best friends and romantic partner (incl. their problem behaviour)	X	X	X	X	X
Intimate partner violence victimisation and perpetration				X	X

### 16.2 Group and gang membership

#### 16.2.1 Overview

<b>Gang Membership Scale (Eurogang Scale)</b>	
<b>Description</b>	This instrument assessed whether participants were part of a peer group. Several follow-up questions enquired about the group's background, such as the number of members, their age, gender, ethnic background, and the activities the group took part in. The instrument had a particular emphasis on illegal activities, and the participants were asked about a range of delinquent acts that their group may or may not engage in.
<b>Source/Developer</b>	Instrument described in Weerman et al. (2009, p. 30), translated to German by H. J. Kerner, and adapted by z-proso Project Team.  Weerman, F., Maxson, C., Esbensen, F.-A., Aldridge, J., Medina, J., & Gemert, F. (2009). <i>Eurogang Program Manual. Background, development, and use of the Eurogang instruments in multi-site, multi-method comparative research</i> . <a href="https://eurogangproject.files.wordpress.com/2018/06/eurogang-manual.pdf">https://eurogangproject.files.wordpress.com/2018/06/eurogang-manual.pdf</a>
<b>Number of Items</b>	19
<b>Response Categories</b>	Varied per item. See below for details.
<b>Derived Constructs</b>	Average level of illegal peer group activities (K5-8_IllegGrpAct) Peer group membership (K5-8_PeerGrp)
<b>Administration History</b>	K5-8
<b>Key Publications</b>	None

### 16.3 Best friends and romantic partner (incl. their problem behaviour)

#### 16.3.1 Overview

<b>Best friends and romantic partner (incl. their problem behaviour)</b>	
<b>Description</b>	Participants were asked about their two best friends and their romantic partner (K5-6). Questions asked about e.g., the gender and age of these individuals, as well as the length of the relationship and the delinquency and substance use of the individuals. From K7 on, the questions pertaining to the participants' romantic partners were included in a separate instrument.  The names of the two best friends (K4-7) and romantic partner (K5-6) have been replaced with a running number to identify the same person in different waves (range from 1 to 10). Missing values are defined as follows for those variables: 99 indicates that a follow-up question has been left out but should have been answered, 98 stands for correct missings due to the filter question (K5-8_2700, K5-8_2800, K5-6_2900).
<b>Source/Developer</b>	z-proso Project Team
<b>Number of Items</b>	Varied per wave: 11 (K4&7), 12 (K5-6), 9 (K8)
<b>Response Categories</b>	Varied per item. See below for details.
<b>Derived Constructs</b>	Having no best friend or romantic partner (K5-8_NoFriend) Level of deviance of best friend 1 (K4-8_DevFr1), best friend 2 (K4-8_DevFr2), and the average of best friend 1 and 2 (K4-8_DevAllFr)

	Level of deviance of romantic partner (K5-8_DevLov) ID to identify friends and romantic partners (K4_1601_num, K4_1701_num, K5-7_2701_num, K5-7_2801_num, K5-6_2901_num)
<b>Administration History</b>	K4-8
<b>Key Publications</b>	Defoe, I., van Gelder, J.-L., Ribeaud, D., & Eisner, M. (2021). The co-development of friend delinquency with adolescent delinquency and short-term mindsets: The moderating role of co-offending. <i>Journal of Youth and Adolescence</i> , 50, 1601-1615. <a href="https://doi.org/10.1007/s10964-021-01417-z">https://doi.org/10.1007/s10964-021-01417-z</a>  Huijsmans, T., Nivette, A., Eisner, M., & Ribeaud, D. (2021). Social influences, peer delinquency, and low self-control: An examination of time-varying and reciprocal effects on delinquency over adolescence. <i>European Journal of Criminology</i> , 18(2), 192-212. <a href="https://doi.org/10.1177/1477370819838720">https://doi.org/10.1177/1477370819838720</a>

## 16.4 Intimate partner violence victimisation and perpetration

### 16.4.1 Overview

<b>Intimate Partner Violence Victimization Scale &amp; Intimate Partner Violence Perpetration Scale</b>	
<b>Description</b>	This instrument assessed violence in relationships symmetrically from both the victim- and perpetrator perspective with three subscales. Different types of intimate partner violence were included, namely physical violence, sexual violence, monitoring, and psychological violence (K8 only).
<b>Source/Developer</b>	The items were adapted from Taylor et al. (2013) and Zweig et al. (2013). The items were translated into German and adapted by the z-proso Project Team.  Taylor, B., Stein, N. D., Woods, D., & Mumford, E. (2013). <i>Shifting Boundaries: Final Report on an Experimental Evaluation of a Youth Dating Violence Prevention Program in New York City Middle Schools</i> . Washington, DC: Police Executive Research Forum. <a href="https://www.ojp.gov/pdffiles1/nij/grants/236175.pdf">https://www.ojp.gov/pdffiles1/nij/grants/236175.pdf</a>  Zweig, J. M., Dank, M., Lachman, P., & Yahner, J. (2013). <i>Technology, Teen Dating Violence and Abuse, and Bullying</i> . Washington, DC: Urban Institute. <a href="http://www.urban.org/sites/default/files/publication/23941/412891-Technology-Teen-Dating-Violence-and-Abuse-and-Bullying.PDF">http://www.urban.org/sites/default/files/publication/23941/412891-Technology-Teen-Dating-Violence-and-Abuse-and-Bullying.PDF</a>
<b>Number of Items</b>	Varied per wave: 14 (K7), 17 (K8)
<b>Response Categories</b>	4-point scale (from „never“ to “over 9 times“)
<b>Derived Constructs</b>	Two types of derived constructs: <b>Type 1 – Victimization</b> Physical violence (K7-8_DATVIOLvPHYS) Sexual violence (K7-8_DATVIOLvSEX) Monitoring (K7-8_DATVIOLvMONIT) Psychological violence (K8_DATVIOLvPSYC) All (K7-8_DATVIOLvALL, K8_DATVIOLvALL17) <b>Type 2 – Perpetration</b> Physical violence (K7-8_DATVIOLpPHYS) Sexual violence (K7-8_DATVIOLpSEX) Monitoring (K7-8_DATVIOLpMONIT) All (K7-8_DATVIOLpALL, K8_DATVIOLpALL17)
<b>Administration History</b>	K7-8
<b>Key Publications</b>	Murray, A., Nagin, D., Obsuth, I., Ribeaud, D., & Eisner, M. (2022). Young adulthood outcomes of joint mental health trajectories: A group-based trajectory model analysis of a 13-year longitudinal cohort study. <i>Child Psychiatry &amp; Human Development</i> , 53, 1083-1096. <a href="https://doi.org/10.1007/s10578-021-01193-8">https://doi.org/10.1007/s10578-021-01193-8</a>  Pereda, N., Greco, A. M., Díaz-Faes, D. A., Eisner, M. & Ribeaud, D. (2022). Early childhood predictors of teen dating violence involvement at age 17. <i>Journal of Youth and Adolescence</i> , 51, 2219–2234. <a href="https://doi.org/10.1007/s10964-022-01664-8">https://doi.org/10.1007/s10964-022-01664-8</a>  Campo-Tena, L., Larmour, S., Ribeaud, D., Eisner, M. (2023). The influence of sociocultural norms, psychological and behavioral factors, and poly-victimization at age 13 on adolescent dating violence victimization at age 17: A longitudinal analysis of multivariate predictors. <i>Journal of Early Adolescence</i> , advance online publication. <a href="http://doi.org/10.1177/02724316231193363">http://doi.org/10.1177/02724316231193363</a>

## 17 Victimisation

### 17.1 Across the surveys

	Age 11 K4	Age 13 K5	Age 15 K6	Age 17 K7	Age 20 K8
<b>Victimisation</b>					
Peer victimisation	X	X	X	X	X
Violent victimisation	X	X	X	X	X
General victimisation					X

### 17.2 Peer victimisation

#### 17.2.1 Overview

<b>Peer victimisation – Bullying Victimization Scale &amp; Bullying Perpetration Scale</b>	
<b>Description</b>	<p>This instrument assessed peer victimisation symmetrically from both the victim- and perpetrator perspective. It included five types of peer bullying: teasing, stealing/damaging belongings, physical violence, rejection, and sexual harassment (from K5).</p> <p>Peer bullying was also assessed at K2. The current instrument is different in that it used different response categories and did not use images to illustrate the questions.</p>
<b>Source/Developer</b>	<p>Adapted from Olweus (1993): Olweus, Dan. 1993. <i>Bullying at School: What We Know and What We Can Do</i>. Oxford, U.K.: Blackwell.</p>
<b>Number of Items</b>	Varied per wave: 4 (K4), 5 (K5-8)
<b>Response Categories</b>	6-point scale (from “never” to “(almost) every day”)
<b>Derived Constructs</b>	<p>Bullying victimisation (K4-8_BullVict4) Bullying perpetration (K4-8_BullPerp4)</p>
<b>Administration History</b>	K4-8
<b>Key Publications</b>	<p>Averdijk, M., Eisner, M., &amp; Ribeaud, D. (2013). Method effects in survey questions about peer victimization. In: Ruiters, S., Bernasco, W., Huisman, W., &amp; Bruinsma, G. J. N. (Eds.), <i>Eenvoud &amp; Verscheidenheid. Liber Amicorum voor Henk Elffers</i> [Simplicity and Diversity. Festschrift for Henk Elffers]. Amsterdam: VU/NSCR, pp. 425-440. <a href="https://www.zora.uzh.ch/id/eprint/166365/">https://www.zora.uzh.ch/id/eprint/166365/</a></p> <p>Averdijk, M., Malti, T., Eisner, M., Ribeaud, D., &amp; Farrington, D. P. (2016). A vicious cycle of peer victimization? Problem behavior mediates stability in peer victimization over time. <i>Journal of Developmental and Life-Course Criminology</i>, 2(2), 162–181. <a href="https://doi.org/10.1007/s40865-016-0024-7">https://doi.org/10.1007/s40865-016-0024-7</a></p> <p>Murray, A., Eisner, M., Ribeaud, D., Kaiser, D., McKenzie, K., &amp; Murray, G. (2019). Validation of a brief self-report measure of adolescent bullying perpetration and victimization: The Zurich Brief Bullying Scales (ZBBS). <i>Assessment</i>, 28(1), 128-140. <a href="https://doi.org/10.1177/1073191119858406">https://doi.org/10.1177/1073191119858406</a></p> <p>Zych, I., Llorent Garcia, V. J., Ttofi, M. M., Farrington, D. P., Ribeaud, D., &amp; Eisner, M. (2020). A longitudinal study on stability and transitions among bullying roles. <i>Child Development</i>, 91(2), 527-545. <a href="https://doi.org/10.1111/cdev.13195">https://doi.org/10.1111/cdev.13195</a></p> <p>Murray, A., Zych, I., Ribeaud, D., &amp; Eisner, M. (2021). Developmental relations between ADHD symptoms and bullying perpetration and victimization in adolescence. <i>Aggressive Behavior</i>, 47(1), 58-68. <a href="https://doi.org/10.1002/ab.21930">https://doi.org/10.1002/ab.21930</a></p> <p>Zych, I., Farrington, D. P., Llorent Garcia, V. J., Ribeaud, D., &amp; Eisner, M. (2021). Childhood risk and protective factors as predictors of adolescent bullying roles. <i>International Journal of Bullying Prevention</i>, 3, 138–146. <a href="https://doi.org/10.1007/s42380-020-00068-1">https://doi.org/10.1007/s42380-020-00068-1</a></p> <p>Zhu, X., Griffiths, H., Eisner, M., Hepp, U., Ribeaud, D., &amp; Murray, A. (2022). Developmental associations between bullying victimization and suicidal ideation and direct self-injurious behavior in adolescence and early adulthood. <i>Journal of Child Psychology and Psychiatry</i>, 63(7), 820-828. <a href="https://doi.org/10.1111/jcpp.13529">https://doi.org/10.1111/jcpp.13529</a></p> <p>Zhu, X., Griffiths, H., Eisner, M., Hepp, U., Ribeaud, D., &amp; Murray, A. (2022). Developmental relations between bullying victimization and suicidal ideation in middle adolescence and emerging adulthood: Do internalizing problems and substance use mediate their links? <i>Journal of Youth and Adolescence</i>, 51(9), 1745–1759. <a href="https://doi.org/10.1007/s10964-022-01630-4">https://doi.org/10.1007/s10964-022-01630-4</a></p> <p>Speyer, L.; Obsuth, I.; Eisner, M.; Ribeaud, D.; Murray, A. (2023). Does prosociality in early- to mid-adolescence protect against later development of antisocial behaviours? <i>Journal of Early Adolescence</i>, advance online publication. <a href="https://doi.org/10.1177/02724316231210254">https://doi.org/10.1177/02724316231210254</a></p>

## 17.3 Violent victimisation

### 17.3.1 Overview

<b>Serious Violent Victimization Scale</b>	
<b>Description</b>	Participants reported on several types of violent victimisation that they experienced during the last year. The types of violence included were: robbery, assault with injury and weapon, assault with injury without weapon, and sexual assault (from K5).
<b>Source/Developer</b>	z-proso Project Team, adapted from an instrument developed by the Kriminologisches Forschungsinstitut Niedersachsen (KFN):  Wetzels, P., Enzmann, D., Mecklenburg, E., & Pfeiffer, C. (2001). <i>Jugend und Gewalt. Eine repräsentative Dunkelfeldanalyse in München und acht anderen deutschen Städten</i> [Youth and Violence. A Representative Dark Number Study in Munich and Eight Other German Cities]. Baden-Baden, Germany: Nomos. <a href="https://repository.difu.de/jspui/handle/difu/278866">https://repository.difu.de/jspui/handle/difu/278866</a>
<b>Number of Items</b>	Varied per wave: 6 (K4), 8 (K5-8)
<b>Response Categories</b>	Varied per item. See below for details.
<b>Derived Constructs</b>	Prevalence of violent victimisation (K4_SerVict3_p, K5-8_SerVict_p) Incidence of violent victimisation (K4_SerVict3_i, K5-8_SerVict_i)
<b>Administration History</b>	K4-8
<b>Key Publications</b>	Van Gelder, J.-L., Averdijk, M., Eisner, M., & Ribeaud, D. (2015). Unpacking the victim-offender overlap. On role differentiation and socio-psychological characteristics. <i>Journal of Quantitative Criminology</i> , 31(4), 653–675. <a href="https://doi.org/10.1007/s10940-014-9244-3">https://doi.org/10.1007/s10940-014-9244-3</a>  Averdijk, M., Van Gelder, J. L., Eisner, M., & Ribeaud, D. (2016). Violence begets violence ... but how? A decision-making perspective on the victim-offender overlap. <i>Criminology</i> , 54(2), 282-306. <a href="https://doi.org/10.1111/1745-9125.12102">https://doi.org/10.1111/1745-9125.12102</a>  Obsuth, I., Müller-Johnson, K., Murray, A., Eisner, M., & Ribeaud, D. (2018). Violent poly-victimisation over time: A longitudinal examination of the prevalence and patterns of physical and emotional victimisation throughout adolescence (11-17 years). <i>Journal of Research on Adolescence</i> , 28(4), 786-806. <a href="https://doi.org/10.1111/jora.12365">https://doi.org/10.1111/jora.12365</a>  Averdijk, M., Ribeaud, D., & Eisner, M. (2019). Childhood predictors of violent victimization at age 17: The role of early social behavioral tendencies. <i>The Journal of Pediatrics</i> , 208(May 2019), 183-190. <a href="https://doi.org/10.1016/j.jpeds.2018.12.056">https://doi.org/10.1016/j.jpeds.2018.12.056</a>  Eisner, M., Averdijk, M., Kaiser, D., Murray, A. L., Nivette, A., Shanahan, L., Van Gelder, J. L., & Ribeaud, D. (2021). The association of polyvictimization with violent ideations in late adolescence and early adulthood: A longitudinal study. <i>Aggressive behavior</i> , 47(4), 472-482. <a href="https://doi.org/10.1002/ab.21965">https://doi.org/10.1002/ab.21965</a>  Ganschow, B.; Zebel, S.; van der Schalk, J.; Hershfield, H. E.; van Gelder, J.-L. (2023). Adolescent stressful life events predict future self-connectedness in adulthood. <i>The Journal of Early Adolescence</i> , advance online publication. <a href="https://doi.org/10.1177/02724316231216380">https://doi.org/10.1177/02724316231216380</a>

## 17.4 General victimisation

### 17.4.1 Overview

<b>General Victimization Scale</b>	
<b>Description</b>	This life event calendar (see above, Life event calendar, for a general description) assessed different types of victimisation since the last survey. This was done retrospectively in 6 months steps.
<b>Source/Developer</b>	z-proso Project Team
<b>Number of Items</b>	7
<b>Response Categories</b>	Calendar, Yes/no
<b>Derived Constructs</b>	–
<b>Administration History</b>	K8
<b>Key Publications</b>	None



## 18 Personality

### 18.1 Across the surveys

	Age 11 K4	Age 13 K5	Age 15 K6	Age 17 K7	Age 20 K8
<b>Personality</b>					
Self-control	X	X	X	X	X
Psychopathy symptoms					X
Psychotic symptoms					X

### 18.2 Self-control

#### 18.2.1 Overview

<b>Self-Control Scale</b>	
<b>Description</b>	Participants reported on various elements of trait self-control, including impulsivity, self-centeredness, risk-seeking, a preference for physical activities, and short-temperedness/low frustration tolerance. Compared to the original version by Grasmick et al. (1993), the scale was limited to two items per subscale, except for the “preference for simple tasks” subscale which was omitted altogether.
<b>Source/Developer</b>	Adapted by the z-proso Project Team from Grasmick et al. (1993). The original scale consisted of 24 items. For each subscale, 2 representative items were chosen. The subscale “preference for simple tasks” was removed.  Grasmick, H. G., Tittle, C. R., Bursik, R. J., & Arneklev, B. J. (1993). Testing the core empirical implications of Gottfredson and Hirschi’s general theory of crime. <i>Journal of Research in Crime &amp; Delinquency</i> , 30 (1), 5–29. <a href="https://doi.org/10.1177/0022427893030001002">https://doi.org/10.1177/0022427893030001002</a>
<b>Number of Items</b>	10
<b>Response Categories</b>	4-point Likert scale (from „fully untrue” to „fully true”)
<b>Derived Constructs</b>	Self-control (K4-8_SCTRL, K5-6_SCTRL8)
<b>Administration History</b>	K4-8
<b>Key Publications</b>	Murray, A., Obsuth, I., Eisner, M., & Ribeaud, D. (2016). Shaping aggressive personality in adolescence. Exploring cross-lagged relations between aggressive thoughts, aggressive behaviour and self-control. <i>Personality and Individual Differences</i> , 97, 1-7. <a href="https://doi.org/10.1016/j.paid.2016.03.022">https://doi.org/10.1016/j.paid.2016.03.022</a>  Van Gelder, J.-L., Averdijk, M., Ribeaud, D., & Eisner, M. (2018). Punitive parenting and delinquency: The mediating role of short-term mindsets. <i>British Journal of Criminology</i> , 58, 644–666. <a href="https://doi.org/10.1093/bjc/azx042">https://doi.org/10.1093/bjc/azx042</a>  Neaverson, A., Murray, A., Ribeaud, D., & Eisner, M. (2020). A longitudinal examination of the role of self-control in the relation between corporal punishment exposure and adolescent aggression. <i>Journal of Youth and Adolescence</i> , 49(6), 1245-1259. <a href="https://doi.org/10.1007/s10964-020-01215-z">https://doi.org/10.1007/s10964-020-01215-z</a>  Van Gelder, J.-L., Averdijk, M., Ribeaud, D., & Eisner, M. (2020). Sanctions, short-term mindsets and delinquency: Reverse causality in a sample of high school youth. <i>Legal and Criminological Psychology</i> , 25(2), 199-218. <a href="https://doi.org/10.1111/lcrp.12170">https://doi.org/10.1111/lcrp.12170</a>  Huijsmans, T., Nivette, A., Eisner, M., & Ribeaud, D. (2021). Social influences, peer delinquency, and low self-control: An examination of time-varying and reciprocal effects on delinquency over adolescence. <i>European Journal of Criminology</i> , 18(2), 192-212. <a href="https://doi.org/10.1177/1477370819838720">https://doi.org/10.1177/1477370819838720</a>  Defoe, I., van Gelder, J.-L., Ribeaud, D., & Eisner, M. (2021). The co-development of friend delinquency with adolescent delinquency and short-term mindsets: The moderating role of co-offending. <i>Journal of Youth and Adolescence</i> , 50, 1601-1615. <a href="https://doi.org/10.1007/s10964-021-01417-z">https://doi.org/10.1007/s10964-021-01417-z</a>  Nivette, A., Obsuth, I., Ribeaud, D., & Eisner, M. (2022). Fair teachers, fair police? Assessing the quasi-causal pathways between perceptions of teacher and police authority in childhood and adolescence. <i>Journal of Youth and Adolescence</i> , 51, 193-207. <a href="https://doi.org/10.1007/s10964-021-01537-6">https://doi.org/10.1007/s10964-021-01537-6</a>  Rodriguez-Ruiz, J., Zych, I., Ribeaud, D., Steinhoff, A., Eisner, M., Quednow, B., & Shanahan, L. (2023). The influence of different dimensions of the parent-child relationship in childhood as longitudinal predictors of substance use in late adolescence. The mediating role of self-control.

*International Journal of Mental Health and Addiction*, advance online publication.  
<https://doi.org/10.1007/s11469-023-01036-8>

Silletti, F.; Iannello, N.; Ingoglia, S.; Inguglia, C.; Cassibba, R.; Eisner, M.; Ribeaud, D.; Musso, P. (2023). Do self-control and parental involvement promote prosociality and hinder internalizing problems? A four-wave longitudinal study from early to mid-to-late adolescence. *Journal of Early Adolescence*, advance online publication. <https://doi.org/10.1177/02724316231210250>

## 18.3 Psychopathy symptoms

### 18.3.1 Overview

#### Psychopathy Scale

<b>Description</b>	This instrument assessed psychopathy symptoms. Psychopathy is one of the three social aversive traits from Jones and Paulhus (2013: Machiavelism, narcissism, and psychopathy).
<b>Source/Developer</b>	This is a short version of the Short Dark Triad (SD3) dimension “psychopathy” by Jones and Paulhus (2013).  Jones, D. N., & Paulhus, D. L. (2013). Introducing the Short Dark Triad (SD3) - A Brief Measure of Dark Personality Traits. <i>Assessment</i> , 21(1), 28-41. <a href="https://doi.org/10.1177/1073191113514105">https://doi.org/10.1177/1073191113514105</a>
<b>Number of Items</b>	6
<b>Response Categories</b>	4-point scale (from „fully untrue” to “fully true”)
<b>Derived Constructs</b>	Psychopathy (K8_PsyPath)
<b>Administration History</b>	K8
<b>Key Publications</b>	None

## 18.4 Psychotic symptoms

### 18.4.1 Overview

#### Psychotic symptoms

<b>Description</b>	This instrument assessed the participants’ psychotic symptoms in the past month. It is noted that the items cannot be used for diagnostic purposes.
<b>Source/Developer</b>	The items were adapted from the Community Assessment of Psychic Experience (CAPE; Mark & Toulopoulou). This is a short version of the CAPE and the items were selected by the best representation of the scale (face validity) and reworded to be in the same format and response scale as the SBQ variables (as they were conducted in the same block as the SBQ).  Mark, W., & Toulopoulou, T. (2016). Psychometric Properties of "Community Assessment of Psychic Experiences": Review and Meta-analyses. <i>Schizophrenia bulletin</i> , 42(1), 34–44. <a href="https://doi.org/10.1093/schbul/sbv088">https://doi.org/10.1093/schbul/sbv088</a>
<b>Number of Items</b>	6
<b>Response Categories</b>	5-point scale (from „never” to “very often”)
<b>Derived Constructs</b>	Psychotic symptoms (K8_nSBQ_PSYCHOSIS)
<b>Administration History</b>	K8
<b>Key Publications</b>	None

## 19 Sexual Orientation and Experience

### 19.1 Across the surveys

	Age 11 K4	Age 13 K5	Age 15 K6	Age 17 K7	Age 20 K8
<b>Sexual Orientation and Experience</b>					
Sexual orientation				X	X
Sexual experiences (including pregnancy and rape)				X	X
Selling and buying sexual services				X	X

### 19.2 Sexual orientation

#### 19.2.1 Overview

<b>Sexual Orientation Scale</b>	
<b>Description</b>	This instrument assessed the participants' sexual orientation.
<b>Source/Developer</b>	Adapted by the z-proso Project Team from the SMASH study: Narring, F., Tschumper, A., Inderwildi Bonivento, L., Jeannin, A., Addor, V., Andrea Bütikofer, et al. (2004). Santé et styles de vie des adolescents âgés de 16 à 20 ans en Suisse (2002). SMASH 2002 : Swiss multicenter adolescent survey on health 2002. Santé et styles de vie des adolescents âgés de 16 à 20 ans en Suisse (2002). SMASH 2002 : Swiss multicenter adolescent survey on health 2002   Unisanté (unisanté.ch)
<b>Number of Items</b>	1
<b>Response Categories</b>	5-point scale (from "only males" to "only females")
<b>Derived Constructs</b>	Sexual Orientation
<b>Administration History</b>	K7-8
<b>Key Publications</b>	Garcia Nuñez, D., Raible-Destan, N., Hepp, U., Kupferschmid, S., Ribeaud, D., Steinhoff, A., Shanahan, L., Eisner, M., & Stulz, N. (2022). Suicidal ideation and self-injury in LGB youth: A longitudinal study from urban Switzerland. <i>BMC Child and Adolescent Psychiatry and Mental Health</i> , 16(21). <a href="https://doi.org/10.1186/s13034-022-00450-5">https://doi.org/10.1186/s13034-022-00450-5</a>

### 19.3 Sexual experiences (including pregnancy and rape)

#### 19.3.1 Overview

<b>Sexual experiences (including pregnancy and rape)</b>	
<b>Description</b>	Participants were asked about their sexual experiences including pregnancy and whether they had perpetrated or been the victim of sexual violence. Items were gender-specific. Experiences with rape were also assessed in other item batteries, namely the delinquency and violent victimisation batteries and in the life event calendar. The current instrument was different in that it was narrower (i.e., focuses on unwanted sex instead of unwanted sexual activities) and had a reference period of two years.
<b>Source/Developer</b>	z-proso Project Team
<b>Number of Items</b>	7
<b>Response Categories</b>	Varied per item. See below for details.
<b>Derived Constructs</b>	Experiences with sexual intercourse Experiences with pregnancy and giving birth
<b>Administration History</b>	K7-8
<b>Key Publications</b>	None

## 19.4 Selling and buying sexual services

### 19.4.1 Overview

<b>Transactional Sex Scale</b>	
<b>Description</b>	This instrument assessed whether the participants had traded sexual services in the past 2 years. Questions were asked symmetrically from both the seller's and buyer's perspective.
<b>Source/Developer</b>	z-proso Project Team
<b>Number of Items</b>	6
<b>Response Categories</b>	3-point scale (from "no" to "yes, more than once")
<b>Derived Constructs</b>	Selling sexual services (K8_PROSTVICT) Buying sexual services (K8_PROSTPERP)
<b>Administration History</b>	K7-8
<b>Key Publications</b>	Averdijk, M., Ribeaud, D., & Eisner, M. (2020). Longitudinal risk factors of selling and buying sexual services among youths in Switzerland. <i>Archives of Sexual Behavior</i> , 49(4), 1279-1290. doi: 10.1007/s10508-019-01571-3