

# Supplementary Material

## File 1

### **Mental health and well-being from childhood to adulthood: Design, methods and results of the 11-year follow-up of the BELLA study**

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**Supplementary Table S1** Age of participants at the measurement points of the BELLA study

Age of participants	BELLA baseline cohort					New participants (included at the 6-year follow-up)		New participants (11-year follow-up)
	Baseline (2002-2006)	1-year follow-up (2004-2007)	2-year follow-up (2005-2008)	6-year follow-up (2009-2012)	11-year follow-up (2014-2017)	6-year follow-up (2009-2012)	11-year follow-up (2014-2017)	11-year follow-up (2014-2017)
3 years						47		
4 years						128		
5 years						152		
6 years						202		
7 years	268					256	1	51
8 years	283	234				197	3	112
9 years	287	249	206			187	9	144
10 years	291	250	231			151	9	135
11 years	265	250	240			110	82	165
12 years	252	212	225			110	113	168
13 years	261	219	181	28		91	121	181
14 years	221	227	207	117		91	126	172
15 years	266	183	208	167		88	75	146
16 years	243	220	167	166		67	60	133
17 years	226	191	192	130	3	61	58	144
18 years		188	158	159	65	72	54	27
19 years			175	111	85	66	38	2
20 years				127	100	73	35	
21 years				95	109	68	24	
22 years				105	82	56	29	
23 years				224	91	138	40	
24 years					90		39	
25 years					81		40	
26 years					78		20	
27 years					62		30	
28 years					71		27	
29 years					37		12	
30 years					15		4	
31 years					4		1	
<b>Total</b>	<b>2,863</b>	<b>2,423</b>	<b>2,190</b>	<b>1,429</b>	<b>973</b>	<b>2,411</b>	<b>1,050</b>	<b>1,580</b>

**Supplementary Table S2** Measurements used at the measurement points of the BELLA study

Construct	Standardised measures/specific items	Baseline	1-year follow-up	2-year follow-up	6-year follow-up	11-year follow-up
<b>Socio-demographic Variables</b>						
Gender	single item	✓	✓	✓	✓	✓
Age	single item	✓	✓	✓	✓	✓
Socio-economic status	Winkler-Index <sup>1</sup>	✓	-	-	-	-
	Revised SES Index <sup>2</sup>	-	-	-	✓	✓
<b>Mental Health Problems</b>						
General mental health problems	SDQ	✓	✓	✓	✓	✓
Anxiety	SCARED	✓	✓	✓	✓	-
	PHQ-Screener	-	-	-	✓	✓
	Selected items of the FBB-ANG assessing Anxiety disorders (from the DISYPS-KJ)	-	-	✓	-	-
Depression	CES-DC	✓	✓	✓	✓	✓
	ADS	-	-	-	-	✓
	DIKJ	✓	✓	✓	-	-
	PHQ-8	-	-	-	✓	✓
	Selected items of the FBB-DES assessing Depressive disorders (from the DISYPS-KJ)	-	-	✓	-	-
	PROMIS-Depression (short form)	-	-	-	-	✓
Conduct Disorder	CBCL	✓	✓	✓	✓	-
ADHD	CRS-R	✓	✓	✓	✓	-
	FBB-HKS assessing Hyperkinetic disorders (from the DISYPS-KJ)	✓	✓	✓	-	-
Eating Disorders	Body weight in kilograms and height in meter for calculating the Body Mass Index (BMI)	✓	✓	✓	✓	✓
<b>Mental Disorders</b>						
	SCOFF	✓	✓	✓	✓	✓
	Confirmed diagnosis of mental health problems by physician.	✓	✓	✓	✓	✓
	DIPS for Anxiety Disorders, Affective Disorders, Conduct Disorders, ADHD, Eating Disorders, Substance abuse/addiction.	-	-	-	✓	-
	CID-S	-	-	-	✓	✓
<b>Health-related Quality of Life</b>						
	Kids-CAT	-	-	-	-	✓
	KIDSCREEN	✓	✓	✓	✓	✓
	KINDL-R	✓	✓	✓	✓	-
	SF-12	-	-	-	-	✓
	SF-36	-	-	-	✓	✓
	PROMIS-Subjective well-being	-	-	-	-	✓
	PROMIS-Family well-being	-	-	-	-	✓

	PROMIS-Physical activity	-	-	-	-	✓
	PROMIS-Relations with peers	-	-	-	-	✓
	PROMIS-General health	-	-	-	-	✓
	PROMIS-Profile 29	-	-	-	-	✓
<b>Risk factors</b>						
Parental psychopathology	SCL-S-9	✓	✓	✓	✓	-
Parental quality of life	SF-12	✓	✓	✓	✓	-
Parental strain	Items assessing the burden caused by housekeeping, being a single parent, tending a family member in need of care, job-related problems, or financial problems	✓	-	-	✓	✓
Risk-Index	Items assessing family conflicts, harmony in partnership, unemployment, parental chronic diseases, unwanted pregnancy, parental alcohol consumption	✓	✓	✓	✓	-
Life events	Items assessing serious illness or accident, death of a close person, marriage or new partnership, change of school	-	✓	✓	✓	✓
<b>Protective factors</b>						
Self-efficacy	GSE	✓	✓	✓	✓	✓
Self-concept	SPPC	✓	✓	✓	-	-
	Selected items of the CHIP-AE	✓	-	-	-	-
Coping	ACOPE, ECOPE	-	✓	✓	✓	-
Optimism	BFW, CSOS	✓	✓	✓	✓	✓
Family climate	FCS	✓	✓	✓	✓	✓
Parental support	8 items from the HBSC	✓	✓	✓	✓	-
Social support	8 selected age-appropriate items from the German SSS	✓	✓	✓	✓	✓
Peer competence	5 items from the HBSC	✓	✓	✓	✓	-
School climate	5 items from the HBSC	✓	✓	✓	✓	-
<b>Health care utilisation</b>						
	Items assessing use (and frequency of use) of health care utilisation by professionals, e.g. psychiatrist or psychologist	✓	✓	✓	✓	✓
	Items assessing paths of mental health care utilisation	-	-	-	✓	-
	Items assessing knowledge of mental health care provision	-	-	-	✓	✓
	Items assessing satisfaction with health care services	-	-	-	✓	✓
	Items assessing barriers towards mental health care utilisation	-	-	-	✓	✓

<sup>1</sup> by Winkler & Stolzenberg [1]; <sup>2</sup> by Lampert et al. [2, 3]

*Note.* Explanations of abbreviations and references are presented at the end of this file.

## List of abbreviations

ACOPE	Problem-focused Coping [Problemorientiertes, aktives Coping] [4]
ADHS	Attention deficit hyperactivity disorder
BFW	Berner Questionnaire on Adolescents' Subjective Well-Being [Berner Fragebogen für Wohlbefinden] [5]
CBCL	Child Behavior Checklist [6]; German version by Arbeitsgruppe Deutsche Child Behavior Checklist [7]
CES-DC	Center for Epidemiological Studies Depression Scale for Children [8]; German version by Barkmann et al. [9]
CHIP-AE	Child Health and Illness Profile-Adolescent Edition [10]
CID-S	Composite International Diagnostic Screener [11]
CRS-R	Conners' Rating Scales-Revised [12]; German version by Erhart, Döpfner [13]
CSOS	Children's Sense of Coherence Scale [14]; German version by Kern [15]
DIKJ	Depression Inventory for Children and Adolescents [Depressions-Inventar für Kinder und Jugendliche] [16, 17]
DIPS	Diagnostic Interview for Mental Disorders in Children and Adolescents [Diagnostisches Interview bei psychischen Störungen im Kindes- und Jugendalter] [18, 19]
DISYPS-KJ	Diagnostic System for Mental Disorders in Childhood and Adolescence [Diagnostik-System für psychische Störungen im Kindes- und Jugendalter] [20]
ECOPE	Emotion-focused Coping [Emotionsorientiertes, vermeidendes Coping] [21]
FBB-ANG	Proxy-questionnaire for Anxiety disorders [Fremdbeurteilungsbogen für Angststörungen] from the Diagnostic System for Mental Disorders in Childhood and Adolescence [Diagnostik-System für psychische Störungen im Kindes- und Jugendalter] [20]
FBB-DES	Proxy-questionnaire for Depressive disorders [Fremdbeurteilungsbogen für Depressive Störungen] ) from the Diagnostic System for Mental Disorders in Childhood and Adolescence [Diagnostik-System für psychische Störungen im Kindes- und Jugendalter] [20]
FBB-HKS	Proxy-questionnaire for Hyperkinetic disorders [Fremdbeurteilungsbogen für hyperkinetische Störungen] from the Diagnostic System for Mental Disorders in Childhood and Adolescence [Diagnostik-System für psychische Störungen im Kindes- und Jugendalter] [20]
FCS	Family Climate Scale [22], which is the German adaptation of the Family Environmental Scale [23, 24]
GSE	General Self-Efficacy Scale [25]; German version by Bäßler and Schwarzer [21]
HBSC	Health Behaviour in School-aged Children survey [26]
KIDS-CAT	Kids-Computer-Adaptive Test [27]
KIDSCREEN	Quality of Life Questionnaire for Children and Adolescents [28]
KINDL-R	Questionnaire to assess Health-related Quality of Life in Children and Adolescents – Revised version [29]
PHQ-8	Patient Health Questionnaire-8 [30]; German version by Löwe, Spitzer [31] and Gräfe, Zipfel [32]
PHQ-Screener	Patient Health Questionnaire-Screener for Panic Syndrom [33]; German version by Löwe, Spitzer [31] and Gräfe, Zipfel [32]
PROMIS	Patient-Reported Outcomes Measurement Information System [34, 35]
SCARED	Screen for Child Anxiety Related Emotional Disorders [36, 37]; German version by Plass, Barkmann [38]
SCL-S-9	Symptom-Checklist Shortversion-9 [39]
SCOFF	SCOFF Questionnaire [40], German version by Hölling and Schlack [41]
SDQ	Strengths and Difficulties Questionnaire [42] & Impact Supplement [43]
SES	socio-economic status (parental education, occupational qualification, occupational position, income)
SF-12	Short Form-12 Health Survey [44]; German version by Bullinger and Kirchberger [45]
SF-36	Short Form-36 Health Survey [46]; German version by Bullinger and Kirchberger [45]
SPPC	Self-Perception Profile for Children [47]; German version by Asendorpf and Aken [48]
SSS	Social Support Scale [49]

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