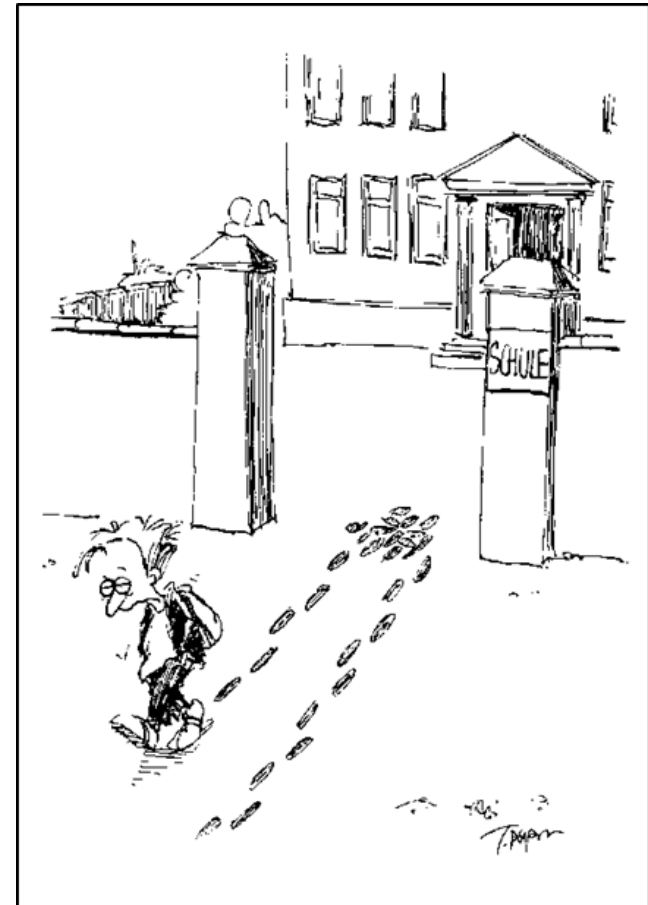


Assessing forms and functions of school absenteeism: The Inventory of School Attendance Problems (ISAP)

M. Knollmann, Volker Reissner, & Johannes Hebebrand, LVR-Clinic
Essen, Department of Child and Adolescent Psychiatry,
Psychosomatics, and Psychotherapy, University of Duisburg-Essen

Agenda

1. Background
2. Development
3. Initial validation
4. Second validation study
5. Current developments



Background: Research on the SRAS in Germany

Walter et al. (2017): SRAS-R (no back translation)

- N=62 inpatients, 56.5% female, M age: 14.7
- Exploratory FA: 4 factors after deletion of 2 items (child version);
parent version: 3 factors; correlations with internalizing and
externalizing symptoms as expected

Knollmann et al. (2017): SRAS (translation by Overmeyer et al., 1994)

- N=156 outpatients & 124 parents, 52.6% male, M age: 14.0
- Exploratory FA: 3 factors after deletion of 3 (parent version: 4) items;
correlations with YSR & CBCL as expected

Advantages of the SRAS

- No other instrument specific to SAPs has been studied so extensively
- Cross-validation in diverse samples and nations
- Despite some methodological challenges: 3 or 4 factor structure confirmed, good reliability and validity
- Highly relevant for treatment decisions
- Widely accepted as “the” measure for SAP-related research → opportunity to compare research results across different nations, samples, professions, and contexts

Limitations of the SRAS (1)

- Confounding of the presence of a symptom and its functional impact on school attendance
- Only students who already are absent are addressed, identification of students with regular attendance despite severe difficulties not possible

C.A. Kearney / Clinical Psychology Review 28 (2008) 451–471

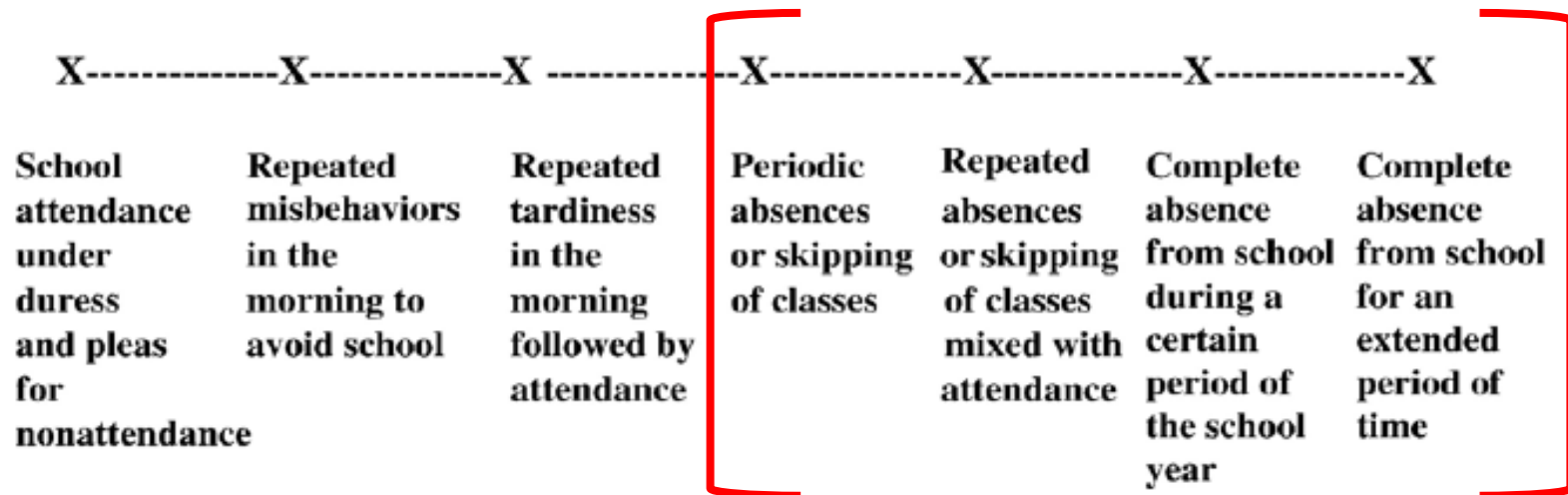


Fig. 1. Continuum of school refusal behavior in youth.

Limitations of the SRAS (2)

- Differentiation of the “form” of SAPs within and beyond the 4 functions is missing: Somatic complaints, depression, performance anxiety, agoraphobia, aggressive-oppositional behavior, ...
- Reactive emotional distress due to problems in the school and family context has not been taken into account: conflicts with parents, critical life events, bullying, social isolation, conflicts with teachers, bad school climate, ...

Development of the Inventory of School Attendance Problems (ISAP)

Aims:

- Screening of adverse emotions prior to or at school → early identification of at-risk students who still attend school regularly
- Separate assessment of different forms of aversive affect and dysfunctional attitudes/motivations before or in school
- Integrated but yet independent assessment of the functional impact of these context-specific emotions on school attendance
- Integration of “distal” factors (family, school, peers)

Development of the ISAP (2)

- Inductive item generation: Clinical interviews with N = 200 patients with SAPs → 25 aspects identified, 124 items
- Sequential Design: Separate scoring options for presence of a symptom & its functional impact on school attendance

Before or in school/school time...	Applies to me				That's why I miss school/attending school is hard for me			
	Never	Some-times	Often	Most of the times	Never	Some-times	Often	Most of the times
...I feel sad.	0	1	2	3	0	1	2	3
...I'm afraid that I might have to say something in front of the whole class.	0	1	2	3	0	1	2	3
...I feel unhappy because I only have a few friends at school.	0	1	2	3	0	1	2	3

Construction & initial validation study

- N = 245 patients with SAPs (53.5 male, M age: 14.4)
- Analysis: Summation of symptom and function response scales for each item (testlets; Wainer & Lewis, 1990)
- Exploratory FA on the 25 tentative scales, item reduction: 48 items, 13 factors/scales, all scales Cronbachs $\alpha \geq .75$
- Associations with YSR, SRAS, and the extent of school absences as expected

Table 2 Loadings for the final exploratory factor analysis (varimax rotation)

Item	Component													h^2
	1	2	3	4	5	6	7	8	9	10	11	12	13	
„Before or in school...														
...I am afraid to say something when other students are around (e.g., during the breaks)	0.76				0.31									0.79
...I am afraid to speak to other people or that others might speak to me	0.74								0.31					0.75
...I am afraid of having to say something in front of the entire class (e.g., giving presentations, being called to respond)	0.73											0.32		0.74
...I worry that I might embarrass myself	0.70													0.70
...I am afraid of being asked about the reasons for my former absences from or coming too late to school	0.59													0.53
...I am unhappy		0.75												0.77
...I am sad		0.72												0.74
...I feel down or depressed		0.70						0.32						0.72
...I have no hope anymore that my situation in school will improve		0.60												0.56
...I think that I will never be able to solve my school problems		0.58												0.63
...I feel tired or without energy		0.51												0.63
...I long for my parents and want to stay with them			0.87							0.33				0.80
...I miss my parents			0.86											0.81
...I am afraid of being in school for such a long time instead of being with my parents			0.85											0.82
...I worry that something terrible might happen to my parents			0.59											0.60
...I feel bad because I get into arguments with one or more of my classmates				0.81										0.76
...I feel excluded by my classmates				0.75										0.80
...I feel unhappy because I only have a few friends at school				0.69										0.68
...I am afraid of being teased or bullied by other students	0.40			0.66										0.64
...I want to do something at home that is more fun than school					0.87									0.80
...I want to do something outside rather than being in school					0.74									0.70
...I just don't feel like going to school or attending specific courses					0.73									0.69
...I think that it is OK if I skipped school once in a while					0.68			0.33						0.66
...I get aggressive easily						0.84								0.83
...I get irritable easily						0.80								0.78
...I am easily provokable						0.80								0.81
...I feel rejected by my parents							0.83							0.80
...I feel that my parents don't care about me							0.81							0.79
...I feel treated unfairly by my parents							0.77							0.76
...I have pain (e.g., stomachache, headache, ...)								0.78						0.79
...I feel sick		0.30						0.75						0.77
...I feel sick to my stomach, have to throw up, or have diarrhea								0.74				0.33		0.73
...I worry about my school grades									0.83					0.83
...I am afraid of exams									0.79					0.80
...I worry about doing bad in school									0.76					0.83
...I think that I would feel better at another school										0.88				0.82
...I think that I am in a bad school										0.83				0.83
...I don't like my school										0.79				0.75
...I must think about problems or incidents in my family											0.86			0.86
...I feel bad because of the problems in my family											0.79			0.80
...I am worried or sad because I can't handle the problems in my family							0.40				0.74			0.83
...I am afraid of vomiting or wetting my pants before I am able to leave the classroom												0.76		0.72
...I am afraid that I will not be able to leave the classroom in time before something embarrassing happens to me	0.40											0.68		0.74
...I am afraid of not being able to leave the classroom when I feel bad								0.34				0.58		0.65
...I am afraid that I will not be able to breathe or that I will faint in school												0.57		0.59
...I feel put under pressure by one or more teachers													0.84	0.81
...I don't feel well because of my problems with one or more teachers													0.78	0.78
...I think that one or more teachers are against me													0.66	0.66
Eigenvalue	12.0	4.1	3.5	2.5	2.3	1.9	1.7	1.6	1.5	1.2	1.1	1.0	1.0	
% variance	25.6	8.5	7.4	5.3	4.8	4.1	3.6	3.2	3.1	2.5	2.2	2.2	2.1	

h^2 = Communalities. Only loadings ≥ 0.32 are depicted. Loadings ≥ 0.40 are in bold. $N = 245$

Scales of the ISAP (1)

- **Social Anxiety** (6 items, $\alpha = .86$; "...I am afraid to say something when other students are around.");
- **Depression** (6 items, $\alpha = .86$; "...I am sad.")
- **Performance Anxiety** (6 items, $\alpha = .86$; "...I am afraid of exams.)
- **Agoraphobia/Panic** (4 items, $\alpha = .75$; "...I'm afraid of not being able to leave the classroom when I feel bad.")
- **Separation Anxiety** (4 items, $\alpha = .85$; "...I miss my parents.")
- **Somatic Complaints** (3 items, $\alpha = .82$; "...I feel sick").
- **School Aversion/Attractive Alternatives** (4 items, $\alpha = .81$; "...I just don't feel like going to school")

Scales of the ISAP (2)

- **Aggression** (3 items, $\alpha = .88$; "...I get aggressive quickly.")
- **Dislike of Specific School** (3 items, $\alpha = .85$; "...I don't like my school.")
- **Problems with Teachers** (3 items, $\alpha = .81$; "...I feel pressured by my teachers.")
- **Problems with Peers** (4 items, $\alpha = .83$; "...I feel excluded by my classmates.")
- **Problems with Parents** (3 items, $\alpha = .85$; "...I feel rejected by my parents.")
- **Problems within the Family** (3 items, $\alpha = .88$; "...I feel bad because of the problems in my family.")

Application of the ISAP (1)

- Extensive instructions are provided
- The ISAP can be filled out alone, but for younger children (<11 years), children with language problems, or intellectual disability instructions from a professional is mandatory

Instructions

The following statements deal with feelings, thoughts, and problems students can experience before or at school.

For each statement, please mark the response that applies best to you. There are no "right" or "wrong" answers!

First, you are asked how good or often the statement describes your feelings or thoughts before or at school (left column).

After that, please state how much or how often the feeling or problem described is a reason why you miss school or attending school is hard for you (right column).

Please answer all items and always mark both columns for each item.

Example:

1. Read the text	2. Mark how good/often the statement applies to you	3. Then mark how much/often this feeling or problem is a reason why you miss school or attending school is hard for you
<p>Before or at school/school time...</p>	<p>Applies to me</p> <p>Not true at all/ Never Just a little true/ Occasionally Pretty much true/ Often Very much true/ Very Often</p>	<p>That's why I miss school or attending school is hard for me</p> <p>Not true at all/ Never Just a little true/ Occasionally Pretty much true/ Often Very much true/ Very Often</p>
<p>...I think that most classes are boring.</p>	<p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>	<p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>

Application of the ISAP (2)

- Available as an interactive pdf, can be filled out on PC/tablet,...
- After completion (no missing values) it can be sent back via email
- Values are stored automatically (Acrobat DC), export to Excel/SPSS

ISAP_English_Version_Final_10.9.2019.pdf - Adobe Acrobat Reader DC

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Freigeben

Füllen Sie bitte das folgende Formular aus. Klicken Sie abschließend auf Formular senden, um das ausgefüllte Formular zurückzusenden. Sie können in dieses Formular eingegebene Daten speichern.

Vorhandene Felder markieren Formular senden

Before or at school/school time...	Applies to me				That's why I miss school or attending school is hard for me			
	Not true at all/ Never	Just a little true/ Occasionally	Pretty much true/ Often	Very much true/ Very Often	Not true at all/ Never	Just a little true/ Occasionally	Pretty much true/ Often	Very much true/ Very Often
1...I feel down or depressed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2...I'd rather do something at home that is more fun than school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3...I feel bad because I have arguments with one or more of my classmates.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4...I am easily irritated.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5...I think that one or more of my teachers are against me or don't like me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6...I'm worried that something terrible might happen to my parents.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

09:23 24.09.2019

Interpretation of the ISAP (1)

- Scores are calculated automatically and displayed on the last page
- For each scale separate scores for „presence of a symptom“ and „functional impact on school attendance“ are delivered

ISAP English_Version_Final_10.9.2019.pdf - Adobe Acrobat Reader DC

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Start Werkzeuge ISAP English_Versio... x

Füllen Sie bitte das folgende Formular aus. Klicken Sie abschließend auf Formular senden, um das ausgefüllte Formular zurückzusenden. Sie können in dieses Formular eingegebene Daten speichern.

Vorhandene Felder markieren Formular senden

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to 5) in the right column. 0,0 to 1,0: low impact, 1,1 to 2,0: medium impact, 2,1 to 3,0: high impact on school attendance.

ISAP Scale:	Symptom Score:	Impact Score:
Depression (Item 1+8+35+41+45+48/6; P>84: 2,0):	2,17	0,67
Social Phobia (Item 9+12+24+32+47/5; P>84: 2,0):	0,80	0,00
Separation Anxiety (Item 6+25+27+38/4; P>84: 1,0):	0,00	0,00
Performance Anxiety (Item 28+29+44/3; P>84: 2,25):	1,00	0,00
Agoraphobia/Panic (Item 7+19+33+46/4; P>84: 0,91):	0,00	0,00
Somatic Complaints (Item 16+17+36/3; P>84: 2,2):	0,33	0,00
School Aversion (Item 2+15+18+21/4; P>84: 1,75):	1,75	0,00
Aggression (Item 4+16+37/3; P>84: 2,0):	0,33	0,00
Problems with Peers (Item 3+22+23+26/4; P>84: 1,5):	2,50	2,75
Problems with Teachers (Item 5+11+42/3; P>84: 1,25):	2,33	2,67
Dislike of Specific School (Item 14+30+39/3; P>84: 2,3):	2,33	2,33
Problems within the Family (Item 31+34+43/3; P>84: 1,2):	0,00	0,00
Problems with Parents (Item 13+20+40/3; P>84: 1,0):	0,00	0,00

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Interpretation of the ISAP (2)

- Descriptive items: extent
of school absences (last 3
months), excused vs.
unexcused absences,
overall difficulties
experienced during school
days ("timeline" of SAPs),
and the whereabouts
during absences

ISAP English_Version_Final_10.9.2019.pdf - Adobe Acrobat Reader DC

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Füllen Sie bitte das folgende Formular aus. Klicken Sie abschließend auf Formular senden, um das ausgefüllte Formular zurückzusenden. Sie können in dieses Formular eingegebene Daten speichern.

Vorhandene Felder markieren Formular senden

Please estimate: How often have you been absent from school during regular school time in the last 12 school weeks, for any reason?

<input type="radio"/> not at all	<input type="radio"/> sometimes (up to 4 school days missed)	<input type="radio"/> often (5 to 12 school days missed)	<input type="radio"/> very often (13 to 36 school days missed)	<input type="radio"/> most of the time (37 to 48 days missed)	<input type="radio"/> (almost) always (more than 48 days missed)
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Are your absences with or without permission/excused or unexcused?

always with permission/excused	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	always without permission/unexcused
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How often is it hard for you on school days (Monday to Friday)...

...to go to sleep in the evening?	<input type="radio"/> never	<input type="radio"/> seldom	<input type="radio"/> sometimes	<input type="radio"/> often
...to get up in the morning?	<input type="radio"/> never	<input type="radio"/> seldom	<input type="radio"/> sometimes	<input type="radio"/> often
...to leave the house in the morning?	<input type="radio"/> never	<input type="radio"/> seldom	<input type="radio"/> sometimes	<input type="radio"/> often
...to walk, drive, or take the bus to school?	<input type="radio"/> never	<input type="radio"/> seldom	<input type="radio"/> sometimes	<input type="radio"/> often
...to enter the schoolyard or the school?	<input type="radio"/> never	<input type="radio"/> seldom	<input type="radio"/> sometimes	<input type="radio"/> often
...to enter the classroom?	<input type="radio"/> never	<input type="radio"/> seldom	<input type="radio"/> sometimes	<input type="radio"/> often
...to go out for recess?	<input type="radio"/> never	<input type="radio"/> seldom	<input type="radio"/> sometimes	<input type="radio"/> often
...to stay in school until last period?	<input type="radio"/> never	<input type="radio"/> seldom	<input type="radio"/> sometimes	<input type="radio"/> often

When I am not in school during regular school time...

...I am at home alone.	<input type="radio"/> never	<input type="radio"/> seldom	<input type="radio"/> sometimes	<input type="radio"/> often
...I am outside (alone or with friends).	<input type="radio"/> never	<input type="radio"/> seldom	<input type="radio"/> sometimes	<input type="radio"/> often
...I am at home with my parents (or other adults).	<input type="radio"/> never	<input type="radio"/> seldom	<input type="radio"/> sometimes	<input type="radio"/> often

Replication study: Preliminary results (1)

Sample (2019-09-19):

- N=234 students with SAPs (165: CAMH outpatients; 30: inpatients treated for obesity; 21: youth welfare; 14: health office; 4: CAMH private practice)

Factor analysis, 10 factors extracted:

- 7 scales replicated
- Peer Problems + Social Anxiety: shared factor
- Problems with Parents & Problems Within the Family: shared factor
- Depression: Items measuring low energy & depressed affect loaded on factor
somatic complaints, items assessing hopelessness loaded on factor
performance anxiety

Replication study: Preliminary results (2)

- **Reliability:** All of the 13 original scales $\alpha \geq .77$
- **Construct validity:** Associations with YSR and SRAS again as expected (e.g., internalizing scales YSR – internalizing scales ISAP; Tangible Rewards SRAS – School Aversion ISAP)
- **Criterial validity:** Associations with extent of school absences & newly created scale „Timeline SAPs/Overall Difficulties on School Days“ (see next slides)

	Scale timeline SAPs total	ISAP Depression	ISAP Somatic complaints	ISAP Social Phobia	ISAP Performance anxiety	ISAP Agora- phobia	ISAP Separation Anxiety
Missed school days	,459** ,000 234	,189** ,004 234	,269** ,000 234	,343** ,000 234	,121 ,064 234	,154* ,018 234	-,050 ,449 234
Leave the house	,703** ,000 234	,434** ,000 234	,349** ,000 234	,417** ,000 234	,274** ,000 234	,299** ,000 234	,217** ,001 234
Way to school	,760** ,000 234	,458** ,000 234	,337** ,000 234	,415** ,000 234	,262** ,000 234	,353** ,000 234	,092 ,160 234
Enter school yard/building	,875** ,000 234	,406** ,000 234	,296** ,000 234	,571** ,000 234	,252** ,000 234	,409** ,000 234	,126 ,053 234
Go into classroom	,863** ,000 234	,423** ,000 234	,319** ,000 234	,602** ,000 234	,296** ,000 234	,435** ,000 234	,094 ,153 234
Breaks	,703** ,000 234	,355** ,000 234	,244** ,000 234	,537** ,000 234	,184** ,005 234	,366** ,000 234	,073 ,269 234
Stay in school until end	,761** ,000 234	,518** ,000 234	,260** ,000 234	,471** ,000 234	,215** ,001 234	,377** ,000 234	,105 ,110 234
Scale timeline SAPs total	1 234	,556** ,000 234	,386** ,000 234	,646** ,000 234	,318** ,000 234	,480** ,000 234	,152* ,020 234

	ISAP Problems w. peers	ISAP Problems w. teachers	ISAP School aversion	ISAP Aggression	ISAP Family problems	ISAP Problems w. parents	ISAP Dislike specific school
Missed school days	,255** ,000 234	,108 ,101 234	-,038 ,566 234	,034 ,603 234	,095 ,146 234	,000 ,998 234	,156* ,017 234
Leave the house	,199** ,002 234	,129* ,049 234	,139* ,033 234	,145* ,027 234	,241** ,000 234	,131* ,045 234	,118 ,072 234
Way to school	,274** ,000 234	,113 ,085 234	,135* ,040 234	,121 ,065 234	,223** ,001 234	,132* ,043 234	,174** ,008 234
Enter school yard/building	,498** ,000 234	,213** ,001 234	,109 ,096 234	,122 ,062 234	,253** ,000 234	,085 ,196 234	,255** ,000 234
Go into classroom	,530** ,000 234	,239** ,000 234	,106 ,107 234	,107 ,102 234	,252** ,000 234	,150* ,022 234	,333** ,000 234
Breaks	,522** ,000 234	,175** ,007 234	-,024 ,720 234	,110 ,092 234	,127 ,053 234	,079 ,229 234	,206** ,001 234
Stay in school until end	,386** ,000 234	,315** ,000 234	,311** ,000 234	,292** ,000 234	,218** ,001 234	,180** ,006 234	,291** ,000 234
Scale timeline SAPs total	,517** ,000 234	,257** ,000 234	,171** ,009 234	,194** ,003 234	,283** ,000 234	,163* ,012 234	,298** ,000 234

Summary

- Comprehensive screening & context-specific assessment of SAP symptoms
- Separate assessment of the patient's subjective beliefs about how symptoms impact on his/her school attendance
- Ranking of symptoms according to their impact can be used for treatment planning
- User-friendly & economical application and interpretation
- Preliminary results indicate reliability, construct- and criterial validity, **but:** partly instable factor structure → CFA with a larger sample size ($N \geq 500$) needed

Perspectives

- Parent and teacher version under construction
- Cross-validation studies: Swedish, Finnish, and English versions available
- School-based study: Early identification of at risk-students and multi-modular tier 2 interventions based on the ISAP

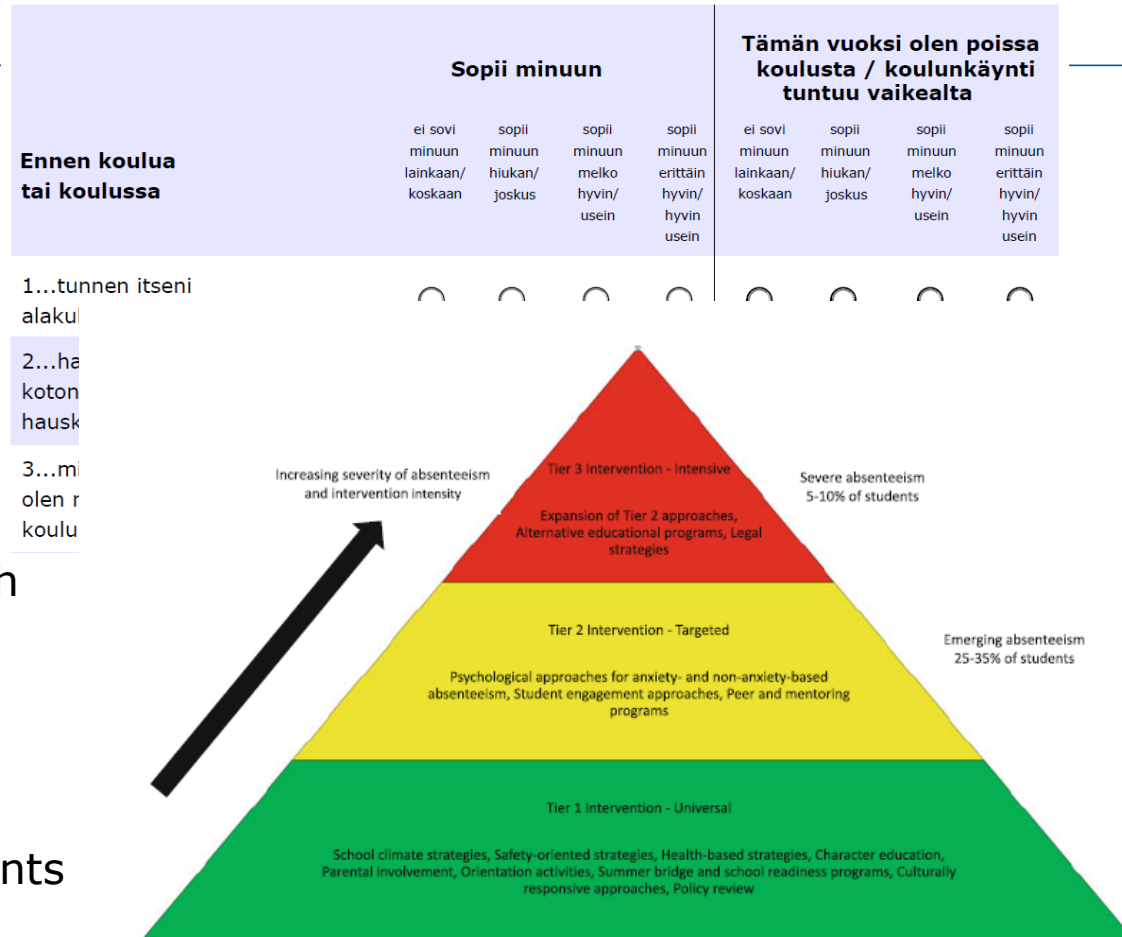


Fig. 1 A Response to Intervention model for problematic school absenteeism

Thank you for your
attention!

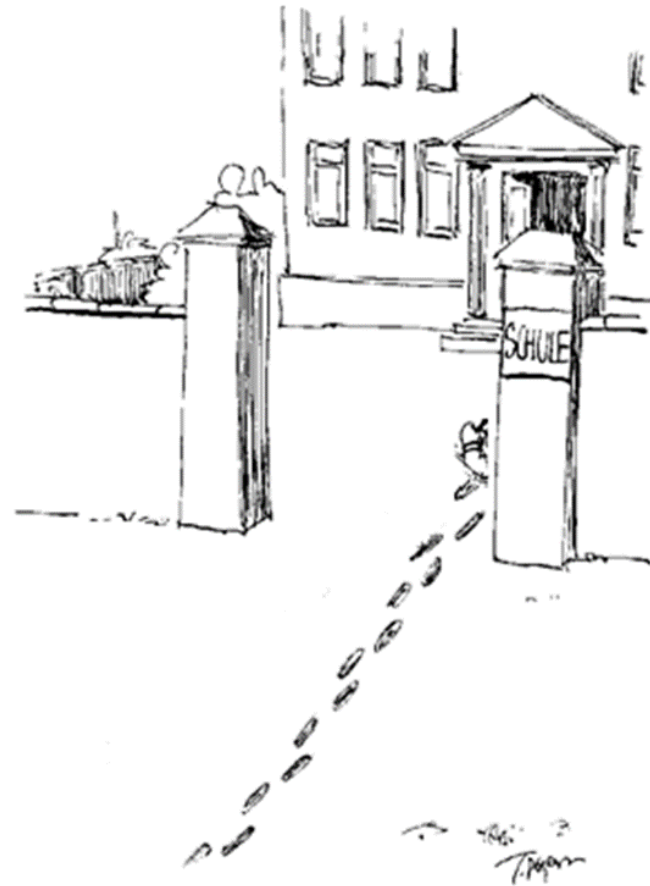


Table 3 Scale characteristics

Scale (number of items)	<i>M</i> (SD)	α	Range r_{it}	Range $r_{\text{symptom/function}}^a$	Range $M_{\text{symptom-function}}^b$	<i>N</i> (%) symptoms $\geq 1.5^c$	<i>N</i> (%) function $\geq 1.5^c$
Depression (6)	1.95 (1.23)	0.86	0.56–0.76	0.63–0.70	0.54–0.88	81 (33.1)	47 (19.2)
Social anxiety (5)	1.41 (1.5)	0.86	0.54–0.74	0.60–0.76	0.41–0.93	61 (24.9)	26 (10.6)
Performance anxiety (3)	1.57 (1.58)	0.87	0.72–0.78	0.50–0.66	0.76–1.05	78 (31.8)	38 (15.5)
Separation anxiety (4)	0.71 (1.13)	0.85	0.50–0.75	0.50–0.77	0.76–1.07	20 (8.2)	12 (4.9)
Agoraphobia/panic (4)	0.64 (1.08)	0.75	0.48–0.58	0.60–0.79	0.45–0.66	19 (7.8)	14 (5.7)
Somatic complaints (3)	2.02 (0.71)	0.82	0.59–0.72	0.71–0.72	0.41–0.56	79 (32.2)	59 (24.2)
School aversion/attractive alternatives (4)	1.64 (1.4)	0.81	0.59–0.72	0.46–0.63	0.46–0.90	75 (30.6)	41 (16.7)
Aggression (3)	1.25 (1.43)	0.88	0.72–0.82	0.47–0.60	0.92–0.1.13	61 (24.9)	19 (7.8)
Problems with peers (4)	1.07 (1.43)	0.83	0.60–0.77	0.69–0.75	0.39–0.67	42 (17.1)	27 (11.1)
Problems with teachers (3)	0.89 (1.23)	0.81	0.57–0.71	0.59–0.76	0.45–0.77	32 (13.1)	23 (9.4)
Problems with parents (3)	0.64 (0.1.1)	0.85	0.69–0.74	0.51–0.61	0.89–0.93	20 (8.2)	9 (3.7)
Problems within the family (3)	0.87 (1.25)	0.88	0.76–0.77	0.51–0.66	0.66–0.78	29 (11.8)	14 (5.7)
Dislike of specific school (3)	1.4 (1.72)	0.85	0.67–0.76	0.53–0.61	0.80–0.89	65 (26.5)	36 (14.7)

 r_{it} : corrected item-scale correlation. $N = 245$ ^aOnly patients with values > 0 on the symptom scale of the respective item were taken into account (Range $n = 29$ –192). All correlations are significant ($p < 0.05$)^bAbsolute value of the difference between the mean of the symptom and the functional scale of each item, only patients with values > 0 on the symptom scale of the respective item were taken into account (range $n = 29$ –192). All differences are significant ($p < 0.05$)^c $N(\%)$ of scale values (sum of item values/number of items) of symptom and function rating scale ≥ 1.5

Category/aspect	Main theme	Example student statements	Item example	Items
Social anxiety	Afraid to speak/to embarrass oneself	"I'm afraid to speak to other students"	I worry that I might embarrass myself	5
Separation anxiety	Afraid of separation from/longing for parents	"I want to stay with my parents"	I miss my parents	5
Performance anxiety	Anxiety or worries about performance	"I'm worried that I might fail in school"	I am afraid of exams	5
School aversion	Perceiving school as uninteresting	"School is so boring"	I think that I am not interested in school	8
Alternative activities at home	Desire for activities at home instead of school	"I'd rather stay at home and play video games"	I want to do something at home that is more fun than school	4
Alternative activities outside	Desire for activities outside instead of school	"I want to hang out in the mall with my friends"	I want to do something outside rather than being in school	4
Opposition towards school attendance	Rejection of school attendance as a norm	"I think it's OK to play truant"	I think it is OK to skip school occasionally	5
Aggression	Aggressive mood	"I feel angry"	I get aggressive fast	4
Agoraphobia/Panic	Losing control; not being able to leave the class	"I'm afraid that I will throw up before I can leave the class"	I am afraid that I won't be able to leave the classroom when I feel bad	5
Somatic complaints	Feeling ill	"My stomach hurts"	I feel sick	5
Fears regarding reactions to school absences	Afraid of being confronted with past absences	"I'm afraid that they might ask me why I wasn't in school"	I am afraid of being asked about the reasons for my former absences or coming late to school	4
Weakness, tiredness	Tiredness, lack of energy	"I'm so weak and tired"	I feel tired or without energy	5
Depressed affect	Sadness	"I'm unhappy"	I am sad	4
Hopelessness with regard to school	School situation is perceived as desperate	"My school situation will never change for the better"	I have no hope anymore that my situation in school will get better	5
Low self-worth	Feeling insufficient	"I think that I'm ugly"	I don't like myself	5
Bullying	Afraid of being teased, threatened or hit	"I'm afraid that someone will pick on me"	I am afraid of being bullied by other students	7
Peer isolation	Feeling excluded	"I have no friends in school"	I feel excluded by my classmates	4
Conflicts with peers	Arguments/conflicts with other students	"I feel bad because I had an argument with my best friend"	I feel bad because I have conflicts with my classmates	3
Bad relationship with teachers	Perceived negative affect from teachers	"My teachers don't like me"	I think that one or more of my teachers are against me	6
Fears regarding teachers	Teachers being perceived as threatening	"I'm afraid that my teacher will make fun of me"	I am afraid of being scolded by teachers	4
Dislike of specific school	Negative perception of (aspects) of the school	"I'm on a very bad school"; "My school is so dirty"	I don't like my school	5
Concerns about the way to school	Negative affect related to the way to school	"I feel insecure on the way to school"	I am afraid that something terrible might happen on my way to school	5
Dislike of class	Disaffirmation of class	"I don't like my class"	I think that I am in a bad class	6
Bad relationship with parents	Perceived negative affect from parents	"My parents treat me unfairly"	I feel rejected by my parents	6
Problems within the family	Current/past problems or incidents in the family (other than Bad Relationship with Parents)	"I think about the conflicts between my parents"; "I'm sad because my grandma died"	I must think about problems or incidents in my family	5

Table 5 Correlations of the Scales with SRAS, YSR, and Extent of School Absenteeism

ISAP scales	YSR social withdrawal	YSR Somatic Complaints	YSR Anxious Depressed	YSR Social Problems	YSR Thought Problems	YSR Attention Problems	YSR Delinquency	YSR Aggression	YSR Internalizing	YSR Externalizing	YSR total	ESV-R Negative Reinforcement	ESV-R Attention Seeking	ESV-R Tangible Rewards	Extent of school absenteeism
Depression	0.66**	0.54**	0.79**	0.49**	0.52**	0.69**	0.61**	0.54**	0.74**	0.59**	0.75**	0.57**	0.16	0.32**	0.33**
Social anxiety	0.61**	0.50**	0.75**	0.60**	0.52**	0.55**	0.40**	0.41**	0.69**	0.39**	0.67**	0.74**	0.30**	0.17	0.26**
Agoraphobia/panic	0.32**	0.38**	0.51**	0.19	0.45**	0.33**	0.27**	0.24*	0.45**	0.25*	0.44**	0.47**	0.38**	0.10	0.12
Separation anxiety	0.33**	0.18	0.31**	0.30**	0.27*	0.34**	0.24*	0.38**	0.27**	0.36**	0.35**	0.17	0.66**	0.09	0.01
Performance anxiety	0.34**	0.41**	0.61**	0.39**	0.38**	0.47**	0.41**	0.48**	0.52**	0.44**	0.55**	0.44**	0.13	0.25**	0.16*
Somatic complaints	0.56**	0.75**	0.54**	0.46**	0.37**	0.42**	0.14	0.26*	0.66**	0.24*	0.52**	0.41**	0.40**	-0.01	0.17**
School aversion/attr. Alternat.	0.02	0.00	0.10	0.04	0.10	0.13	0.44**	0.29**	0.08	0.39**	0.22*	0.07	0.08	0.49**	0.14*
Aggression	0.25*	0.33**	0.50**	0.18	0.44**	0.49**	0.53**	0.71**	0.42**	0.64**	0.53**	0.30**	0.13	0.37**	0.12
Problems within the family	0.27**	0.17	0.44**	0.20	0.27*	0.36**	0.43**	0.31**	0.33**	0.38**	0.39**	0.25**	0.23*	0.34**	0.14*
Problems with Parents	0.38**	0.26*	0.55**	0.25*	0.38**	0.38**	0.47**	0.45**	0.46**	0.44**	0.51**	0.41**	0.19*	0.30**	0.16*
Dislike of specific school	0.20	0.07	0.20	0.26*	0.22*	0.14	0.23*	0.18	0.17	0.22*	0.21*	0.32**	0.08	0.31**	0.22**
Problems with teachers	0.26*	0.24*	0.40**	0.28**	0.37**	0.34**	0.34**	0.42**	0.35**	0.40**	0.36**	0.39**	0.13	0.37**	0.12
Problems with peers	0.40**	0.39**	0.53**	0.60**	0.45**	0.33**	0.31**	0.34**	0.48**	0.32**	0.50**	0.58**	0.31**	0.20*	0.22**

YSR Youth Self Report, German version [28]. *ESV-R* modified German version of the School Refusal Assessment Scale [24]. $n_{\text{YSR}} = 95$; $n_{\text{ESV-R}} = 110$; $n_{\text{Extent of school absenteeism}} = 243$
** $p < 0.001$; * $p < 0.05$