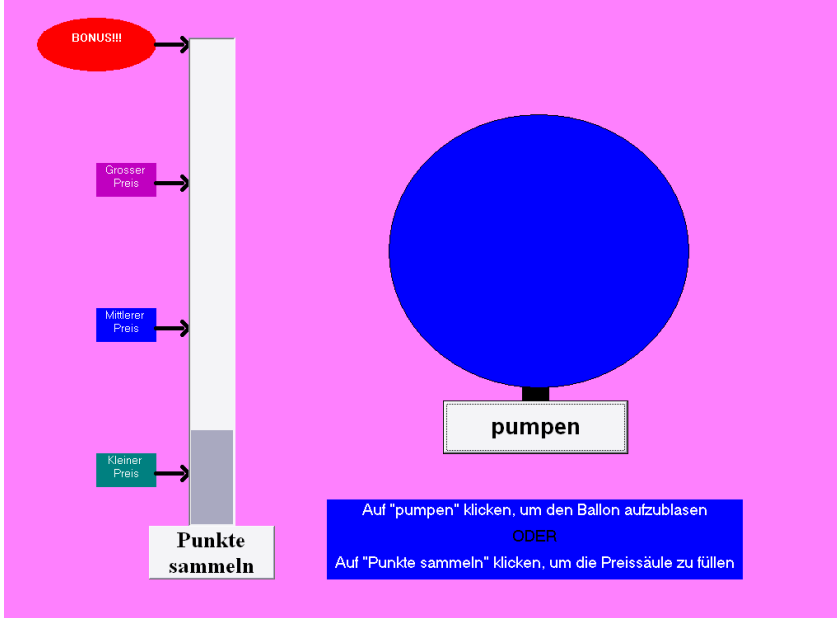




Technical Report  
**Children Wave 2**

**Balloon Analogue Risk Task – BART**

<b>Source/Developer</b>	<ul style="list-style-type: none"> <li>• Carl Lejuez (University of Maryland)</li> <li>• Lejuez, C. W., Read, J. P., Kahler, C. W., Richards, J. B., Ramsey, S. E., Stuart, G. L., Strong, D. R. &amp; Brown, R. A. (2002). "Evaluation of a Behavioral Measure of Risk Taking: The Balloon Analogue Risk Task (BART)", <i>Journal of Experimental Psychology</i>, 8 (2), 75–84.</li> </ul>
<b>Adaptations</b>	Abbreviated version (20 instead of 30 turns)
<b>Description</b>	<p>The <i>Balloon Analogue Risk Task</i> (BART) is a computer-based behavioural assessment of risk taking. Subjects are told that they have to earn as many points as possible. Points are collected by first inflating a balloon by clicking the "pumpen" ("pump") button several times (see instrument image below) and then by transferring the collected pumps by clicking on "Punkte sammeln" ("collect points"). The more the balloon is inflated, the more points can be collected. However, the balloon can burst at any additional pump and all points of that turn are then lost. A total of twenty turns are played, each turn being either ended by a click on "collect points" or by a burst. Depending on the total score after 20 turns, subjects are rewarded with a small, a medium or a big prize (i.e., real balloons of different sizes).</p> <p>Based on this design, risk taking is indicated by the total of collected points and the number of bursts. A high level of risk taking is characterised by a high total number of bursts and by a high average number of pumps. Calculated risk taking will result in a high total number of collected points and a limited number of bursts while over-cautiousness will result in a low total score coupled with very few bursts.</p> <p>To quantify risk taking the authors of the game recommend to use adjusted values defined as "the average number of pumps excluding balloons that exploded (i.e., the average number of pumps on each balloon prior to money collection)" (Lejuez et al. 2002, 78).</p>
<b>Administration History</b>	Wave 2
<b>Instrument Image</b>	

## Bart Total Pumps

### Case Summary & Descriptive Statistics "BART Total pumps"

Variable Name	Missings (%)	Mean	Standard Deviation	Skewness	Kurtosis
BART_Total	2 (0.1%)	23.48	11.31	1.06	2.14

N= 1335

Comments:

- 1) BART\_Total with excessive skewness and high kurtosis

### Sum Index Descriptive Statistics

#### "BART Total pumps"

Group	N	Mean	Standard Deviation	Min.	Max.	Skewness	Kurtosis	ANOVA		
								df	F	p
Full sample	1333	23.48	11.31	0.67	91.25	1.06	2.14			
Gender								1	3.79	.052
Girls	655	22.87	11.13	0.67	91.25	1.13	2.80			
Boys	678	24.08	11.46	3.05	78.50	1.01	1.62			
Treatment								3	0.93	.426
Control	342	24.08	10.83	4.32	56.78	0.65	0.22			
Triple P	326	22.96	11.40	2.60	91.25	1.43	4.79			
PATHS	363	23.86	11.50	3.10	78.50	1.13	1.99			
Combination	302	22.93	11.52	0.67	68.44	1.03	1.59			

Comments:

- 1) All subgroups except Control with excessive skewness and high kurtosis

### Correlations with Subscales & DVs

Variable	r	p	N	Boys			Girls		
				r	p	N	r	p	N
Subscales									
BART low pumps	.931	***	1332	.923	***	677	.941	***	655
BART medium pumps	.933	***	1333	.923	***	678	.942	***	655
Child SBQ									
Aggression W2	.047	ns	1332	.062	ns	677	.009	ns	655
Prosociality W2	-.053	ns	1332	-.039	ns	677	-.057	ns	655
Aggression W1	.054	*	1321	.068	ns	672	.031	ns	649
Prosociality W1	.011	ns	1321	.025	ns	672	.009	ns	649
Teacher SBQ2.1									
Total Aggression	.126	***	1304	.131	**	664	.105	**	640
Prosociality	-.041	ns	1305	-.081	*	664	.034	ns	641
Parent SBQ									
Aggression	.069	*	1172	.075	ns	615	.044	ns	557
Prosociality	-.019	ns	1170	-.034	ns	616	.024	ns	554

1 \*\*\* p<.001, \*\* p<.01, \* p<.05, ns p>.05

Comments:

- 1) Significant correlations with Child SBQ Aggression W1 and Parent SBQ Aggression get insignificant after division in girls and boys subgroups

## BART low pumps

### Case Summary & Descriptive Statistics "BART low pumps"

Variable Name	Missings (%)	Mean	Standard Deviation	Skewness	Kurtosis
BART_Low	3 (0.2%)	24.44	13.37	1.32	2.73

N= 1335

Comments:

- 1) BART\_Low with excessive skewness and high kurtosis

### Sum Index Descriptive Statistics

#### "BART low pumps"

Group	N	Mean	Standard Deviation	Min.	Max.	Skewness	Kurtosis	ANOVA		
								df	F	p
Full sample	1332	24.44	13.37	0	102	1.32	2.73			
Gender								1	1.23	.268
Girls	655	24.03	12.77	0	102	1.26	2.96			
Boys	677	24.84	13.92	3.20	94	1.53	2.48			
Treatment								3	0.23	.878
Control	342	24.63	12.44	4.20	65.40	0.87	0.59			
Triple P	325	23.95	13.63	2.60	102.00	1.61	4.59			
PATHS	363	24.74	13.76	3.20	94.00	1.48	3.21			
Combination	302	24.39	13.66	0	80.67	1.20	1.92			

Comments:

- 1) All subgroups except Control with excessive skewness and high kurtosis

### Correlations with Subscales & DVs

Variable	r	p	N	Boys			Girls		
				r	p	N	r	p	N
Subscales									
BART total pumps	.931	***	1332	.923	***	677	.941	***	655
BART medium pumpst	.740	***	1332	.711	***	677	.776	***	655
Child SBQ									
Aggression W2	.027	ns	1331	.040	ns	676	-.001	ns	655
Prosociality W2	-.053	ns	1331	-.033	ns	676	-.075	ns	655
Aggression W1	.040	ns	1320	.048	ns	671	.025	ns	649
Prosociality W1	.005	ns	1320	.037	ns	671	-.029	ns	649
Teacher SBQ2.1									
Total Aggression	.135	***	1303	.136	***	663	.125	**	640
Prosociality	-.041	ns	1304	-.096	*	663	.039	ns	641
Parent SBQ									
Aggression	.051	ns	1172	.056	ns	615	.035	ns	557
Prosociality	-.004	ns	1170	-.011	ns	616	.018	ns	554

1 \*\*\* p<.001, \*\* p<.01, \* p<.05, ns p>.05

## BART medium pumps

### Case Summary & Descriptive Statistics "BART medium pumps"

Variable Name	Missings (%)	Mean	Standard Deviation	Skewness	Kurtosis
BART_Medium	2 (0.1%)	22.95	11.33	1.00	0.07

N= 1335

Comments:

- 1) BART\_Medium with excessive skewness

### Sum Index Descriptive Statistics

#### "BART medium pumps"

Group	N	Mean	Standard Deviation	Min.	Max.	Skewness	Kurtosis	ANOVA		
								df	F	p
Full sample	1333	22.95	11.33	0	93.00	1.00	2.09			
Gender								1	7.22	.007
Girls	655	22.10	11.16	0	80.50	1.03	1.92			
Boys	678	23.76	11.45	2.00	93.00	0.98	2.29			
Treatment								3	2.07	.103
Control	342	23.87	11.23	3.90	57.33	0.65	0.10			
Triple P	326	22.42	11.10	0	80.50	1.03	2.58			
PATHS	363	23.42	11.63	3.00	93.00	1.32	3.95			
Combination	302	21.90	11.28	1.11	65.83	0.98	1.53			

Comments:

- 1) Girls, Triple P and PATHS subgroups with excessive skewness
- 2) Girls, boys, Triple P, PATHS and Combination subgroups with high kurtosis
- 3) Significant F-value for gender group differences

### Correlations with Subscales & DVs

Variable	r	p	N	Boys			Girls		
				r	p	N	r	p	N
Subscales									
BART	.933	***	1333	.923	***	678	.942	***	655
Riddle compliment	.740	***	1332	.711	***	677	.776	***	655
Child SBQ									
Aggression W2	.055	*	1332	.065	ns	677	.018	ns	655
Prosociality W2	-.047	ns	1332	-.037	ns	677	-.037	ns	655
Aggression W1	.062	*	1321	.077	*	672	.033	ns	649
Prosociality W1	.018	ns	1321	.016	ns	672	.042	ns	649
Teacher SBQ2.1									
Total Aggression	.096	**	1304	.099	*	664	.069	ns	640
Prosociality	-.040	ns	1305	-.057	ns	664	.025	ns	641
Parent SBQ									
Aggression	.075	*	1172	.081	*	615	.044	ns	557
Prosociality	-.031	ns	1170	-.042	ns	616	.017	ns	554

<sup>1</sup> \*\*\* p<.001, \*\* p<.01, \* p<.05, ns p>.05

Comments:

- 1) Significant correlation with Child SBQ Aggression W2 gets insignificant after division in boys and girls subgroup
- 2) Significant correlations with Teacher SBQ Aggression and Parent SBQ Aggression disappear for girls subgroup