## [ Quality of Life Research – Online Resource 3 ]

## Development and construct validation of a parent-proxy quality of life instrument in children with bronchopulmonary dysplasia aged 4-8 years old

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Items	BMI	MAP	FEV <sub>1</sub>	FVC	CBCL	TRF-	TRF-
					-TOT	ТОТ	AF
Number of participants	42	42	40	38	36	19	19
Coughing	.125	.130	116	071	.138	.322	221
Wheezing	.024	.098	.109	.110	.180	.085	359
Impaction of mucus in airways	.084	.099	071	057	.153	.099	.132
Sputum in throat or airways	.034	.195	147	085	.036	.402	047
Dyspnea when having a cold	.022	.221	127	.029	.180	.391	359
Having attacks of dyspnea	.013	.149	057	079	.120	.101	307
Having a cold more often	.070	.124	.045	.034	.169	.467	208
Having a cold that lasts longer	029	.176	.057	.051	.081	.588	349
Bronchial hyperreactivity	.055	.101	017	.089	.222	.446	294
Having earpain/otitis	.108	.173	084	.111	.028	.188	031
Trouble sleeping because of dyspnea	.014	.245	106	131	.042	.193	221
Trouble sleeping because of coughing	.109	.112	061	098	.082	.258	139
Need more sleep than other children	236	.021	124	276	.066	008	.010
Difficulty progressing in school	.052	.021	.123	.104	.242	.621	385
Needing extra support at school	.124	.164	.051	.104	.288	.595	402
Difficulty concentrating	.125	062	.206	.158	.219	.659	230
Being easily distracted	.113	056	.186	.155	.162	.624	234
Requiring a lot of structure daily	.072	.106	.078	.116	.318	.466	250
Difficulty with arithmetic	.006	.315	.143	.183	.053	.314	407
Difficulty with grammar	034	.227	032	060	063	.327	371
Choking easily	197	.038	077	277	.137	.136	224
Stomach ache due to constipation	069	171	.160	.156	.335	.337	590
Difficulty eating a serving of food	381	.275	065	146	.109	.236	060
Taking a long time when eating	395	.200	055	146	.140	139	.118
Often don't want to eat	373	.200	021	124	.140	.083	120
Feeling cold easily	419	.083	.064	062	040	183	.196
Vomiting easily	.023	.085	294	291	054	365	.190 .464
Being sensitive to loud noises	419	074	114	186	.236	.041	.159
Problems with writing neatly	.090	.069	285	115	051	.223	.424
Problems in physical education/sports	024	.319	283 430	542	324	.014	.445
Problems practicing swimming	148	.250	430	437	193	.404	.141
Easily tripping or falling	056	015	296	413	.086	.397	.226
Problems with cycling	.018	.198	290 468	413	108	.388	.220 .487
Problems with coordination or balance	.018	.041	408	438	103	.212	.638
Exertional dyspnea	063	.041	427	430 419	137	.212	.004
Easily tired during sports/exercise	027	.314 .385	270	260	148	.234 .404	.244
Not keeping up in exercise/playing	101 .180	.385	<b>339</b> .058	<b>367</b> .043	193 .294	.404 119	.141 058
Trouble parting from parent(s) Withdrawal from social situations	.180 187	.292 005				119	
			111 044	186	.153	.361	170 454
Consults with the general practitioner	016	011		.035	.321		
Feeling less self-confident	076	.302	118	139	.299	.406	109
Fear of being left alone by parent(s)	.203	.039	.120	.107	.369	065	012
Being shy	.067	.081	.181	.159	.453	.119	240
Having scars of surgeries, punctures or	.053	.079	114	039	.279	.452	242
intravenous lines	000	0.52	146	0.65	010	110	0.50
Frequent need to use antibiotics	.022	.053	146	065	.210	.112	058
Frequent need to use airway medication	006	310	241	.318	062	.221	302
Frequent need to use medication	060	.153	271	209	.077	.511	229

## Correlation coefficients of all items entering validation phase with the selected measurements.

Significant correlations (P<0.05) are marked bold. Abbreviations: BMI= body mass index; MAP= mean arterial pressure;  $FEV_1$ = Forced Expiratory Volume in 1 second; FVC= Forced Vital Capacity; CBCL-TOT= total scale of child behavior checklist; TRF-TOT= total scale of teacher report form, TRF-AF= scale sum of academic functioning of teacher report form,  $\alpha$ = Cronbach's alpha.