

Background

In 2003/4, IRT analysis of the items in the EDI was performed. From this, changes suggested included category changes to the following items - **QA2, QA3, QA4, QA5, QA9, QA10, QA11, QA12, QA13, QB1, QB2, QB3, QB4, QB5, QB6, QB7, QC1, and QC2** - which came from the following domains: physical health and well-being, social competence and communication and general knowledge.

Changes were made to the EDI for the 2004/5 and subsequent implementations. With these changes we observed the shift to lower mean scores for the physical health and well-being and communication general knowledge domains. This study was designed to enable us empirically assess adjustments that had to be made to earlier implementations of EDI to account for category changes.

Method:

To get a total sample of 200 children, a 4 or more students were chosen per site or community randomly. We were fortunate to have teachers in 3 schools in MB and other teacher volunteers help complete the instruments for the selected children.

The 2003/4 instruments were sent in 2 waves after the end of February 2006 to teachers to be completed for the selected children. Incentives were gift cards from Chapters.

To date 161 have been received and scanned from sites in Manitoba and Ontario.

Results

Item by item analyses which resulted in the following empirical recodes:

RECODE QA2 QA3 QA4 QA5 (10=10) (7.5=10) (5=0) (2.5=0) (0=0) (88=88) (99=99).
RECODE QA9 QA10 QA11 QA12 QA13 (10=10) (7.5=10) (5=5) (2.5=0) (0=0) (88=88) (99=99).
RECODE QB1 QB3 QB4 QB5 QB6 QB7 (10=10) (7.5=10) (5=5) (2.5=0) (0=0) (88=88) (99=99).
RECODE QB2 (10=10) (7.5=10) (5=5) (2.5=5) (0=0) (88=88) (99=99).
RECODE QC1 QC2 (10=10) (7.5=10) (5=5) (2.5=0) (0=0) (88=88) (99=99).

NB: format is as follows: old code = new code!

The tables below show that the 10th percentile low cutoffs for the domains do not change except for the communications and general knowledge domain. There is a shift to higher means for the domains of physical health and well-being and communication and general knowledge. As well, the proportions of children falling below the percentile cutoffs are similar.

EDI domain descriptive statistics using Normative sample

(a) Before OCCS recode:

Statistics

		phys Physical well-being	soc Social competence	emot Emotional maturity	langcog Language and cog devt	comgen Communication and gen knowledge
N	Valid	116512	116817	115739	116200	116794
	Missing	348	43	1121	660	66
Mean		8.7867	8.2853	8.0476	8.3577	7.7332
Median		9.0385	8.8462	8.3333	8.8462	8.0556
Std. Deviation		1.04616	1.74116	1.50592	1.81489	1.94170
Minimum		1.82	.00	.17	.00	.00
Maximum		10.00	10.00	10.00	10.00	10.00
Percentiles	10	7.3077	5.5769	6.0000	5.7692	5.0000
	25	8.2692	7.3077	7.1667	7.6923	6.3889
	50	9.0385	8.8462	8.3333	8.8462	8.0556
	75	9.6154	9.6154	9.1667	9.6154	9.4444
	90	10.0000	10.0000	9.8333	10.0000	10.0000

(b) after OCCS recode:

Statistics

		phys Physical well-being	soc Social competence	emot Emotional maturity	langcog Language and cog devt	comgen Communication and gen knowledge
N	Valid	116512	116817	115739	116200	116794
	Missing	348	43	1121	660	66
Mean		9.1147	8.3510	8.0476	8.3577	8.1803
Median		9.6154	9.0385	8.3333	8.8462	9.3750
Std. Deviation		1.28079	1.77609	1.50592	1.81489	2.47805
Minimum		.77	.00	.17	.00	.00
Maximum		10.00	10.00	10.00	10.00	10.00
Percentiles	10	7.3077	5.5769	6.0000	5.7692	4.3750
	25	8.4615	7.3077	7.1667	7.6923	6.8750
	50	9.6154	9.0385	8.3333	8.8462	9.3750
	75	10.0000	9.8077	9.1667	9.6154	10.0000
	90	10.0000	10.0000	9.8333	10.0000	10.0000

(c) Percent low for each domain:

Domain	Before OCC recodes	After OCCS recodes
Physical health and well-being	10.4	11.2
Social competence	9.1	9.0
Emotional maturity	10.9	10.9
Language and cognitive development	9.5	9.5
Communication and general knowledge	10.4	11.6
low on 1+ domains	25.9	26.8
low on 2+ domains	12.9	13.4