

Additional file 1

Multitrait analysis of the Child PKU-QOL

Table 1-1 - Item convergent and discriminant criteria of the in 'PKU in general' module in the child evaluable population (n=92)

Domains	# items	Range of item-scale correlations	% of items meeting convergent criterion ^a	% of items meeting discriminant criterion ^b
Emotional impact of PKU	3	0.16–0.40	33%	67%
Practical impact of PKU	2	0.32–0.32	0%	50%
Social impact of PKU	3	0.35–0.41	33%	67%
Anxiety – blood test	2	0.25–0.25	0%	100%

PKU: phenylketonuria.

^aItem Convergent criterion met if item-scale correlation greater than 0.4.

^bItem Discriminant validity criterion met if the correlation of an item with its own scale is greater than the correlation of this item with all the other scales.

Table 1-2 - Item convergent and discriminant criteria of 'Supplement administration' module in the child evaluable population (n=92)

Domains	# items	Range of item-scale correlations	% of items meeting convergent criterion ^a	% of items meeting discriminant criterion ^b
Adherence to supplements	2	0.23–0.23	0%	50%
Social impact of supplements	2	0.29–0.29	0%	50%

^aItem Convergent criterion met if item-scale correlation greater than 0.4.

^bItem Discriminant validity criterion met if the correlation of an item with its own scale is greater than the correlation of this item with all the other scales.

Table 1-3 - Item convergent and discriminant criteria of the 'Dietary protein restriction' module in the child evaluable population (n=92)

Domains	# items	Range of item-scale correlations	% of items meeting convergent criterion ^a	% of items meeting discriminant criterion ^b
Food temptations	2	0.47, 0.47	100%	0%
Adherence to dietary protein restriction	2	0.30, 0.30	0%	50%
Social impact of dietary protein restriction	5	0.31, 0.65	80%	60%

^aItem Convergent criterion met if item-scale correlation greater than 0.4.

^bItem Discriminant validity criterion met if the correlation of an item with its own scale is greater than the correlation of this item with all the other scales..

Multitrait analysis of the Ado PKU-QOL questionnaire

Table 1-4 - Item convergent and discriminant criteria of the 'PKU in General' module in the adolescent evaluable population (n=110)

Domains	# items	Range of item-scale correlations	% of items meeting convergent criterion ^a	% of items meeting discriminant criterion ^b
Emotional impact of PKU	5	0.41, 0.60	100%	60%
Practical impact of PKU	3	0.24, 0.52	33%	0%
Social impact of PKU	3	-0.11, 0.26	0%	33%
Anxiety – blood test	2	0.60, 0.60	100%	100%

PKU: phenylketonuria.

^aItem Convergent criterion met if item-scale correlation greater than 0.4.

^bItem Discriminant validity criterion met if the correlation of an item with its own scale is greater than the correlation of this item with all the other scales.

Table 1-5 - Item convergent and discriminant criteria of the 'Supplement administration' module in the adolescent evaluable population (n=110)

Domains	# items	Range of item-scale correlations	% of items meeting convergent criterion ^a	% of items meeting discriminant criterion ^b
Adherence to supplements	4	0.40–0.60	75%	100%
Practical impact of supplements	4	0.56–0.65	100%	100%

^aItem Convergent criterion met if item-scale correlation greater than 0.4.

^bItem Discriminant validity criterion met if the correlation of an item with its own scale is greater than the correlation of this item with all the other scales.

Table 1-6 - Item convergent and discriminant criteria of the 'Dietary protein restriction' module in the adolescent evaluable population (n=110)

Domains	# items	Range of item-scale correlations	% of items meeting convergent criterion ^a	% of items meeting discriminant criterion ^b
Food temptations	2	0.58–0.58	100%	100%
Adherence to dietary protein restriction	4	0.30–0.46	75%	50%
Practical impact of dietary protein restriction	7	0.12–0.59	57%	57%
Social impact of dietary protein restriction	5	0.51–0.86	100%	100%

^aItem Convergent criterion met if item-scale correlation greater than 0.4.

^bItem Discriminant validity criterion met if the correlation of an item with its own scale is greater than the correlation of this item with all the other scales.

Multitrait analysis of the Adult PKU-QOL questionnaire

Table 1-7 - Item convergent and discriminant criteria of the 'PKU in general' module in the adult evaluable population (n=104)

Domains	# items	Range of item-scale correlations	% of items meeting convergent criterion ^a	% of items meeting discriminant criterion ^b
Emotional impact of PKU	5	0.42–0.58	100%	40%
Practical impact of PKU	4	0.31–0.39	0%	75%
Social impact of PKU	4	0.37–0.46	75%	75%
Anxiety – blood test	2	0.41–0.41	100%	50%

PKU: phenylketonuria.

^aItem Convergent criterion met if item-scale correlation greater than 0.4.

^bItem Discriminant validity criterion met if the correlation of an item with its own scale is greater than the correlation of this item with all the other scales.

Table 1-8 - Item convergent and discriminant criteria of the 'Supplement administration' module in the adult evaluable population (n=104)

Domains	# items	Range of item-scale correlations	% of items meeting convergent criterion ^a	% of items meeting discriminant criterion ^b
Adherence to supplements	3	0.47–0.57	100%	100%
Practical impact of supplements	4	0.33–0.55	75%	75%

^aItem Convergent criterion met if item-scale correlation greater than 0.4.

^bItem Discriminant validity criterion met if the correlation of an item with its own scale is greater than the correlation of this item with all the other scales.

Table 1-9 - Item convergent and discriminant criteria of the 'Dietary protein restriction' module in the adult evaluable population (n=104)

Domains	# items	Range of item-scale correlations	% of items meeting convergent criterion ^a	% of items meeting discriminant criterion ^b
Food temptations	2	0.67–0.67	100%	100%
Adherence to dietary protein restriction	5	0.53–0.80	100%	100%
Practical impact of dietary protein restriction	7	0.31–0.66	86%	57%
Social impact of dietary protein restriction	6	0.42–0.65	100%	67%

^aItem Convergent criterion met if item-scale correlation greater than 0.4.

^bItem Discriminant validity criterion met if the correlation of an item with its own scale is greater than the correlation of this item with all the other scales.

Multitrait analysis of the Parent PKU-QOL questionnaire

Table 1-10 - Item convergent and discriminant criteria of the 'PKU in general' module in the parent evaluable population (n=253)

Domains	# items	Range of item-scale correlations	% of items meeting convergent criterion ^a	% of items meeting discriminant criterion ^b
Emotional impact of PKU	4	0.34–0.54	50%	50%
Practical impact of PKU	6	0.25–0.59	83%	83%
Social impact of PKU	5	0.31–0.49	80%	60%
Anxiety – blood test	2	0.54–0.54	100%	0%
Impact of anxiety – blood test	2	0.64–0.64	100%	0%

PKU: phenylketonuria.

^aItem Convergent criterion met if item-scale correlation greater than 0.4.

^bItem Discriminant validity criterion met if the correlation of an item with its own scale is greater than the correlation of this item with all the other scales.

Table 1-11 - Item convergent and discriminant criteria of 'Dietary protein restriction' module in the parent evaluable population (n=253)

Domains	# items	Range of item-scale correlations	% of items meeting convergent criterion ^a	% of items meeting discriminant criterion ^b
Practical impact of dietary protein restriction	7	0.47–0.68	100%	100%
Management of dietary protein restriction	6	0.56–0.68	100%	100%

^aItem Convergent criterion met if item-scale correlation greater than 0.4.

^bItem Discriminant validity criterion met if the correlation of an item with its own scale is greater than the correlation of this item with all the other scales.