

american *CAMP* association®

ACA Youth Outcomes Battery Norming Tables 2012

Acknowledgements are extended to the Not-for-Profit Council for their support in funding as well as the participation of various nonprofit camps in several stages of data collection. Sincere appreciation is also extended to our University of Utah colleagues, including Dr. Jim Sibthorp, Dr. Laurie Browne, and Cass Morgan, for their assistance with data management and analyses. Without the help of all of these individuals, the participating camps, and the campers who completed the surveys, this important work of norming our ACA Youth Outcomes Battery (YOB) would not have been possible.



PREFACE

These norms have been established for the ACA YOB as a way to provide benchmarks for camps that wish to have some comparison points for their own evaluations that use the YOB. The focus of these norms is on the eleven basic scales developed for use in camps or other youth settings. The norms are stated in 10 percent increments as a way to simplify their use. The tables include norms in general (includes both day and resident camps), resident camp only, gender, and age groups. While the psychometrics are not included in this document, specifics can be requested from ACA (research@ACA camps.org) as well as checking www.ACAcamps.org/research/enhance/youth-outcomes-resources. We hope these norms will help you document not only the specific outcomes you intentionally target but also your ability to offer quality camp experiences for your participants!

Instructions for Using the Normative Data for Comparisons

1. Collect the desired outcome data for your camp using the basic (retrospective change only) form of the YOB scales.
2. Calculate average (mean) scores for the outcomes using the YOB templates. These means must be scaled to match the means (1–5 for all outcomes except Camp Connectedness, which is 1–6). This is typically done by adding the raw item scores together and then dividing by the number of items for each camper. All camper scores can then be averaged together to create a “camp” or “session” average for the YOB scale of interest.
3. This average score can then be compared to the normative means and percentiles included in this report.
4. As an example, if an ACA-accredited resident camp was interested in Friendship Skills (FS), Problem Solving Confidence (PS), and Independence (IND), it might administer these YOB scales to its campers. It would then create means for each subscale. For this example, assume that the means were 2.7 for FS, 3.5 for PS, and 4.2 for Independence. Using Table 1 for FS, 2.7 falls between 2.5 and 2.97. Therefore, this camp’s campers scored about half way between the 10th and 20th percentile compared to the normative sample of ACA-accredited resident campers. For Problem Solving Confidence and Independence, it would be correct to report that PS scores for this camp were at the 50th percentile (3.50) and that Independence (Ind) scores for this camp were just above the 70th percentile (4.125).
5. If an exact percentile is necessary for reporting, linear interpolation will yield a reasonable approximation of the precise percentile.

KEY FOR THE OUTCOMES MEASURES	
FCB	Family Citizenship
COMP	Competence
RESP	Responsibility
IND	Independence
TW	Teamwork
PS	Problem-Solving
AE	Affinity for Exploration
CC	Camp Connectedness
FS	Friendship Skills
AN	Affinity for Nature
SWB	Spiritual Well-Being

Table 1. Normative Statistics for All Campers

		FCB	COMP	RESP	IND	TW	PS	AE	CC	FS	AN	SWB
PERCENTILE	10	2.0000	2.3750	2.0000	2.1333	2.1250	2.0000	2.7500	4.0000	2.4286	2.2000	2.0000
	20	2.3333	2.7500	2.5000	2.6667	2.6250	2.2500	3.1250	4.6667	2.9286	2.8000	2.5000
	30	2.6667	3.0000	2.8333	3.0000	3.0000	2.6250	3.5000	5.0833	3.3571	3.3000	3.0000
	40	3.0000	3.2500	3.1667	3.3333	3.2500	3.0000	3.8750	5.3333	3.6429	3.8000	3.3333
	50	3.3333	3.6250	3.5000	3.6667	3.6250	3.2500	4.1250	5.5000	4.0000	4.1000	4.0000
	60	3.5000	3.8750	3.8333	4.0000	3.8750	3.5000	4.3750	5.5833	4.2143	4.4000	4.3333
	70	3.8333	4.1250	4.1667	4.3333	4.1250	4.0000	4.5000	5.7500	4.5000	4.7000	4.6667
	80	4.1667	4.3750	4.5000	4.5000	4.5000	4.2500	4.7500	5.9167	4.7143	4.9000	5.0000
	90	4.6667	4.7500	4.8333	4.8333	4.7500	4.7500	5.0000	6.0000	4.9286	5.0000	5.0000
Mean		3.3107	3.5486	3.4828	3.5938	3.5259	3.2895	3.9371	5.2116	3.8041	3.8393	3.7024
Median		3.3333	3.6250	3.5000	3.6667	3.6250	3.2500	4.1250	5.5000	4.0000	4.1000	4.0000
Std. Deviation		.91044	.86796	.97963	.97629	.95158	.96966	.8507	.85282	.93005	.05744	.1281

Table 2. Normative Statistics for Resident Campers Only

		FCB	COMP	RESP	IND	TW	PS	AE	CC	FS	AN	SWB
PERCENTILE	10	2.0000	2.3750	2.0000	2.1667	2.1250	2.0000	2.7500	4.0000	2.5000	2.2000	2.0000
	20	2.5000	2.7500	2.5000	2.6667	2.5250	2.2500	3.1250	4.7500	2.9714	2.8000	2.5000
	30	2.6667	3.0000	2.8333	3.0000	3.0000	2.6250	3.5000	5.0833	3.3571	3.3000	3.0000
	40	3.0000	3.3750	3.1667	3.5000	3.2500	3.0000	3.8750	5.3333	3.6429	3.8000	3.3333
	50	3.3333	3.6250	3.5000	3.8333	3.6250	3.2500	4.1250	5.5000	4.0000	4.0000	4.0000
	60	3.5000	3.8750	3.8333	4.0000	3.8750	3.5000	4.3750	5.6667	4.2143	4.5000	4.3333
	70	3.8333	4.1250	4.1667	4.3333	4.1250	4.0000	4.5000	5.7500	4.5000	4.7000	4.6667
	80	4.1667	4.3750	4.5000	4.6667	4.5000	4.2500	4.7500	5.9167	4.7143	5.0000	5.0000
	90	4.6667	4.7500	4.8333	5.0000	4.7500	4.7500	5.0000	6.0000	4.9286	5.0000	5.0000
Mean		3.3196	3.5718	3.4837	3.6429	3.5285	3.2979	3.9523	5.2583	3.8225	3.8488	3.7354
Median		3.3333	3.6250	3.5000	3.8333	3.6250	3.2500	4.1250	5.5000	4.0000	4.0000	4.0000
Std. Deviation		.90696	.86236	.97879	.96457	.95268	.97212	.81489	.78912	.89106	.05103	.12482

Table 3. Normative Statistics for Female Campers Only

		FCB	COMP	RESP	IND	TW	PS	AE	CC	FS	AN	SWB
PERCENTILE	10	2.0000	2.3750	2.0000	2.1667	2.1250	2.0000	2.7500	4.0833	2.5000	2.1000	2.0000
	20	2.5000	2.7500	2.5000	2.6667	2.6250	2.2500	3.1250	4.7500	3.0000	2.7000	2.6667
	30	2.6667	3.0000	2.8333	3.0000	3.0000	2.6250	3.6250	5.0833	3.4286	3.2000	3.1333
	40	3.0000	3.3750	3.1667	3.3333	3.2500	3.0000	3.8750	5.3333	3.7857	3.7000	3.5000
	50	3.3333	3.6250	3.6667	3.6667	3.6250	3.2500	4.1250	5.5000	4.0000	4.0000	4.1667
	60	3.6667	3.8750	3.8333	4.0000	4.0000	3.6250	4.3750	5.6667	4.2857	4.4000	4.3333
	70	4.0000	4.1250	4.1667	4.3333	4.2500	4.0000	4.6250	5.7500	4.5000	4.6000	4.6667
	80	4.3333	4.4250	4.5000	4.6667	4.5000	4.3750	4.7500	5.8500	4.7143	4.9000	5.0000
	90	4.6667	4.7500	4.8333	5.0000	4.8750	4.7500	5.0000	6.0000	4.9286	5.0000	5.0000
Mean	3.3511	3.5924	3.5075	3.6220	3.5649	3.3175	3.9780	5.2420	3.8772	3.8041	3.8042	
Median	3.3333	3.6250	3.6667	3.6667	3.6250	3.2500	4.1250	5.5000	4.0000	4.0000	4.1667	
Std. Deviation	.91448	.85886	.98732	.98605	.96416	.97875	.81711	.79109	.88109	1.06668	1.08118	

Table 4. Normative Statistics for Male Campers Only

		FCB	COMP	RESP	IND	TW	PS	AE	CC	FS	AN	SWB
PERCENTILE	10	2.0000	2.1250	2.0000	2.0000	2.0000	2.0000	2.5875	4.0000	2.2143	2.2000	2.0000
	20	2.3333	2.5000	2.5000	2.5000	2.5000	2.1250	3.1250	4.5833	2.7857	2.9000	2.3333
	30	2.6000	2.8750	2.8333	2.8333	2.8750	2.5000	3.3750	5.0000	3.0714	3.4000	2.8333
	40	2.8333	3.2500	3.0000	3.3333	3.2500	2.8750	3.7500	5.3000	3.4286	3.9000	3.1667
	50	3.1667	3.5000	3.3333	3.6667	3.5000	3.1250	4.0000	5.5000	3.7143	4.2000	3.6667
	60	3.5000	3.7500	3.8333	3.8333	3.7500	3.3750	4.2500	5.5833	4.0714	4.5000	4.1667
	70	3.6667	4.0000	4.0000	4.1667	4.0000	3.7500	4.5000	5.7500	4.4286	4.7000	4.5000
	80	4.0000	4.2500	4.3333	4.5000	4.3750	4.1250	4.7500	5.8500	4.6429	4.9000	4.8333
	90	4.5000	4.6250	4.8333	4.8333	4.6250	4.6250	5.0000	6.0000	4.9929	5.0000	5.0000
Mean	3.2113	3.4364	3.4182	3.5191	3.4362	3.2102	3.8657	5.1424	3.6661	3.9026	3.5913	
Median	3.1667	3.5000	3.3333	3.6667	3.5000	3.1250	4.0000	5.5000	3.7143	4.2000	3.6667	
Std. Deviation	.90343	.88925	.97097	.96057	.92301	.94042	.89271	.97121	.98784	1.03419	1.15828	

Table 5. Normative Statistics for Campers' 10 and Under

		FCB	COMP	RESP	IND	TW	PS	AE	CC	FS	AN	SWB
PERCENTILE	10	2.0000	2.3750	2.0000	2.1667	2.1250	2.0000	2.6250	3.5000	2.4286	2.3700	2.0000
	20	2.5000	2.7500	2.5000	2.8333	2.6250	2.2500	3.1000	4.3333	3.0000	3.2000	2.5000
	30	3.0000	3.1250	2.8333	3.0000	3.0000	2.6250	3.5000	4.8833	3.3929	3.6000	3.0000
	40	3.1667	3.3750	3.1667	3.5000	3.2500	3.0000	3.8750	5.0833	3.7143	4.0800	3.3333
	50	3.3333	3.6250	3.6667	3.6667	3.6250	3.2500	4.1250	5.2500	4.0000	4.4000	4.0000
	60	3.8333	3.8750	4.0000	4.0000	4.0750	3.6250	4.3750	5.5000	4.3571	4.6000	4.3333
	70	4.1667	4.2500	4.3333	4.3333	4.3750	4.1250	4.6250	5.6667	4.5714	4.8000	4.6667
	80	4.5000	4.6250	4.6667	4.6667	4.6250	4.5000	4.7500	5.7500	4.7857	4.9000	5.0000
	90	4.8333	4.8750	5.0000	5.0000	4.8750	4.8750	5.0000	5.9167	5.0000	5.0000	5.0000
Mean		3.4705	3.6275	3.5462	3.6421	3.5922	3.3502	3.9399	4.9810	3.8558	4.0414	3.7008
Median		3.3333	3.6250	3.6667	3.6667	3.6250	3.2500	4.1250	5.2500	4.0000	4.4000	4.0000
Std. Deviation		.95059	.89796	1.02168	.97002	.99975	1.03313	.89613	1.03004	.94165	.98085	1.19641

*Note: The YOB is designed for campers ages 10–17 and is especially well suited for campers ages 10–13 (ACA, 2011). The sample includes campers 7–9 years old (N = 141) and reflects a relatively small percentage (7.2 percent) of the entire sample. Nonetheless, given the YOB's intended age, data should be interpreted with caution.

Table 6. Normative Statistics for Campers Ages 11-12 Years

		FCB	COMP	RESP	IND	TW	PS	AE	CC	FS	AN	SWB
PERCENTILE	10	2.0000	2.2500	2.0000	2.1667	2.0000	2.0000	2.6250	3.7500	2.2857	2.0000	2.0000
	20	2.5000	2.6250	2.3333	2.6667	2.5000	2.2500	3.0000	4.4167	2.8571	2.4000	2.9000
	30	2.6667	3.0000	2.8333	3.0000	2.8750	2.6250	3.3750	4.9167	3.2143	3.0000	3.5000
	40	3.0000	3.2500	3.1667	3.3333	3.2500	2.8750	3.6250	5.2500	3.5714	3.5000	4.0000
	50	3.3333	3.6250	3.5000	3.6667	3.5000	3.2500	4.0000	5.4167	3.8571	4.0000	4.3333
	60	3.5000	3.8750	3.8333	4.0000	3.7500	3.5000	4.2500	5.5833	4.1429	4.3000	4.5000
	70	4.0000	4.1250	4.1667	4.3333	4.1250	3.8750	4.3750	5.6667	4.3571	4.6000	4.8333
	80	4.1667	4.3750	4.5000	4.5000	4.5000	4.2500	4.6250	5.8333	4.6429	4.8000	5.0000
	90	4.6000	4.7500	4.8333	4.8333	4.7500	4.7500	4.8750	6.0000	4.8571	5.0000	5.0000
Mean		3.3257	3.5432	3.4591	3.6007	3.4656	3.2885	3.8373	5.1107	3.7246	3.6819	3.9502
Median		3.3333	3.6250	3.5000	3.6667	3.5000	3.2500	4.0000	5.4167	3.8571	4.0000	4.3333
Std. Deviation		.89998	.87545	.97634	.96041	.95728	.96976	.84412	.87734	.92373	1.11860	1.09672

Table 7. Normative Statistics for Campers 13 Years Old

		FCB	COMP	RESP	IND	TW	PS	AE	CC	FS	AN	SWB
PERCENTILE	10	2.0000	2.3375	2.0000	2.0000	2.1250	2.0000	2.7500	4.3333	2.4286	2.1100	2.0000
	20	2.3333	2.5000	2.5000	2.3333	2.6250	2.1250	3.1250	4.8667	2.8571	2.6200	2.2333
	30	2.5000	2.8750	2.8333	2.8333	3.0000	2.5000	3.5000	5.1667	3.1571	3.1000	2.8333
	40	2.8333	3.0000	3.0000	3.1667	3.1250	2.8750	3.8750	5.4167	3.5714	3.6000	3.0000
	50	3.1667	3.3750	3.3333	3.6667	3.5000	3.0000	4.1250	5.5000	3.9286	4.0000	3.6667
	60	3.3333	3.6250	3.6667	4.0000	3.7500	3.3750	4.3750	5.6667	4.1429	4.4000	4.1667
	70	3.6667	3.8750	4.0000	4.1667	4.0000	3.6250	4.6250	5.8333	4.5000	4.7000	4.5000
	80	4.0000	4.2000	4.1667	4.5000	4.2500	4.0000	4.7500	5.9167	4.7857	5.0000	4.8333
	90	4.3333	4.5375	4.5333	4.8333	4.6250	4.5000	5.0000	6.0000	4.9286	5.0000	5.0000
Mean		3.1546	3.3785	3.3628	3.5041	3.4520	3.1317	3.9541	5.3391	3.7736	3.8045	3.5317
Median		3.1667	3.3750	3.3333	3.6667	3.5000	3.0000	4.1250	5.5000	3.9286	4.0000	3.6667
Std. Deviation		.85648	.81299	.90603	1.00890	.88956	.89111	.84032	.68690	.92984	1.06009	1.15777

Table 8. Normative Statistics for Campers Ages 14 Years and Older

		FCB	COMP	RESP	IND	TW	PS	AE	CC	FS	AN	SWB
PERCENTILE	10	2.0000	2.3750	2.0000	2.0000	2.1875	2.0000	3.0000	4.5833	2.5714	2.4000	2.0000
	20	2.3333	2.7500	2.5000	2.5000	2.7500	2.2500	3.3750	5.0000	3.0714	2.9400	2.5000
	30	2.5000	3.1250	2.9500	3.0000	3.1250	2.7500	3.7500	5.4167	3.4286	3.4000	2.8333
	40	3.0000	3.3750	3.3333	3.5000	3.3750	3.0000	4.0000	5.5833	3.8429	4.0000	3.1667
	50	3.1667	3.6250	3.6667	3.8333	3.7500	3.3125	4.2500	5.6667	4.0714	4.1000	3.5000
	60	3.5000	3.8750	4.0000	4.0000	4.0000	3.6250	4.5000	5.7500	4.3571	4.4000	4.1667
	70	3.8333	4.1250	4.1667	4.3333	4.2500	4.0000	4.6250	5.8333	4.5714	4.7000	4.5000
	80	4.0000	4.4000	4.5000	4.5000	4.5000	4.2500	4.7500	6.0000	4.7857	5.0000	4.8333
	90	4.5000	4.6250	4.8333	4.8333	4.8750	4.6250	5.0000	6.0000	5.0000	5.0000	5.0000
Mean		3.2212	3.5920	3.5415	3.5899	3.6325	3.3362	4.0726	5.4334	3.9117	3.9164	3.5869
Median		3.1667	3.6250	3.6667	3.8333	3.7500	3.3125	4.2500	5.6667	4.0714	4.1000	3.5000
Std. Deviation		.90900	.85268	.99595	.99803	.91886	.93915	.79800	.71107	.90448	.98399	1.07417