

BSA BEST Study  
Research Question 1:  
Preliminary Results Summary  
July 2020



## Research Question 1:

### Preliminary Results—Summary

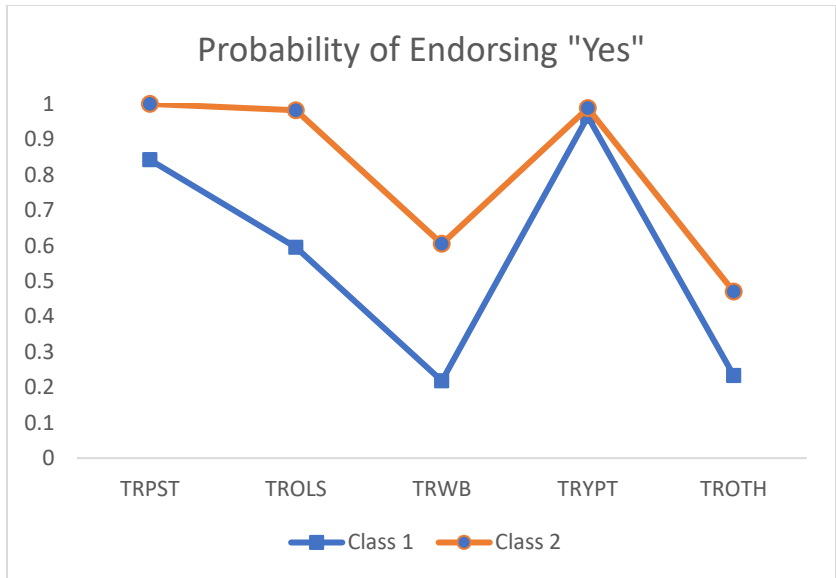
July 2020

**Research Question 1: What combination of adult formal trainings and experiences are associated with more positive youth outcomes (e.g., character outcomes)?**

#### Scoutmaster Formal Training

- Two groups were found related to Scoutmaster training (taking into account Wood Badge Training, Youth Protection Training, Position Specific Training, Outdoor Leadership Training, and other training): (1) Scoutmasters who are moderately trained and (2) Scoutmasters who are highly trained.

Latent Class Analyses were run using the Mixture model type and MLR estimator in MPlus 8 to examine 5 variables and their clustering patterns within Scoutmasters in BSA (N=581). The variables of interest were whether Scoutmasters had taken: Wood Badge Training, Youth Protection Training, Scoutmaster Position Specific Training, Outdoor Leadership Training, and other unspecified trainings. Each variable was binary with respondents reporting “yes” they had taken this training in the past, or “no” they had not taken the training in the past. The two class solution emerged to be the best fit to the data (BIC: 2130.041,  $\chi^2(20) = 22.474$ ,  $p = .3153$ ,  $p(\text{BLRT}) < .0001$ ,  $E_k = .651$ ). Class one ( $n = 76$ ; 13%) is “moderately trained” with a moderate probability of reporting yes to having taken each training (Range = .233-.842). Class two ( $n = 505$ ; 87%) is “highly trained” with a higher probability of reporting yes to having taken each training (Range = 0.47-1.00). Note that Youth Protection Training was high for both classes (Class one: .964; Class two: .982) suggesting that everyone had a high probability of reporting that they had completed Youth Protection Training.



Probability of endorsing "Yes": KEY	
TRPST	Position Specific Training
TROLS	Outdoor Leadership Skills
TRWB	Wood Badge
TRPYPT	Youth Protection
TROTH	Other Training

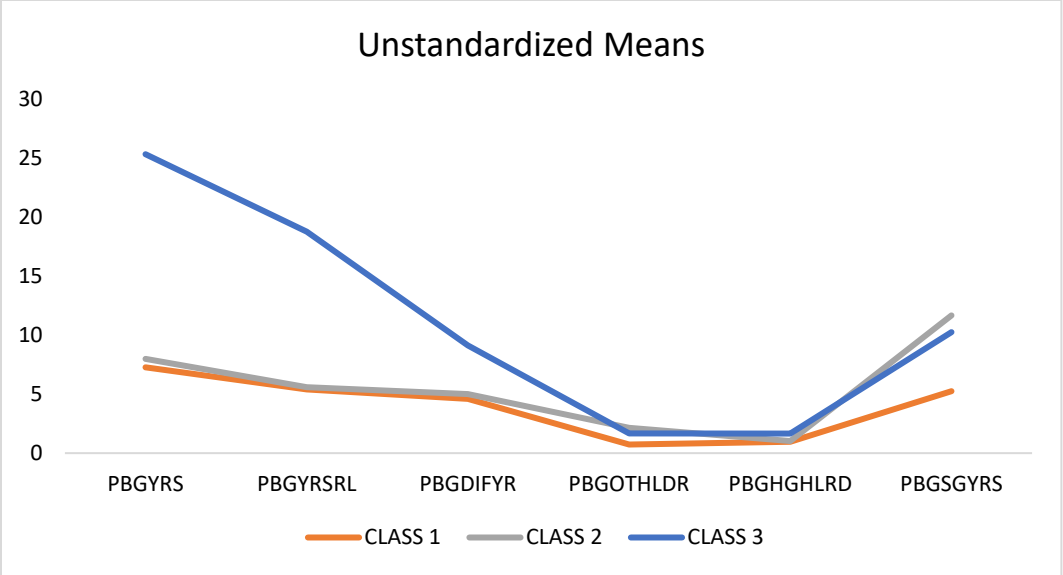
### Scoutmaster Experience

- In an analysis of eight indicators of Scoutmaster experience with scouting and BSA leadership, three groups emerged: (1) Low Experience, (2) High Scouting Years and Rank, and (3) Highly Involved.

Latent Profile Analyses were run examining 87 variables and their clustering patterns within Scoutmasters in BSA (N=582), using the Mixture model type and MLR estimator in MPlus 8. Five variables were continuous: Total years as a Scoutmaster, Number of years in current role in current Troop, Number of years in a different role in the current Troop, Previous roles served, Current additional higher roles served, and Total years in scouting as a youth. In addition, two variables were categorical: a yes/no variable pertaining to being in Order of the

Arrow, and the highest rank achieved (coded as 1=Eagle with Palms, 2=Eagle, 3=Life Scout, and 4=Less than Life Scout).

A three class (varying diagonal) solution was chosen as the best model for these variables (BIC: 16804, LL = -8242.97 [Scale = 1.2256],  $p(\text{BLRT}) < .001$ ,  $E_k = .909$ ). Based on the estimated model, class one had 233 participants (40%), class two had 187 participants (32%), and class three had 161 participants (28%). Class one was the “low experience” group, whose members reported the lowest levels of each variable. The probability of being in Order of the Arrow was the lowest for this group compared to the other two groups (probability = .522). The low experience group additionally had the highest probability of being in the “Less than Life Scout” rank group (probability = 0.952), meaning they were less likely to have achieved Life, Eagle, or Eagle with Palms (the three highest ranks in BSA). Class two was the “High scouting years and rank” group; compared to the other two groups, they reported the most years in scouting (mean ~12 years) and the highest likelihood of being in the top three rank groups (Eagle with Palms, Eagle, and Life Scout; probabilities .231, .422, and .164 respectively). Their means were slightly higher than the low experience group in all other variables, meaning they had spent slightly fewer years in Scout leadership positions. Class three was the “highly involved” group, reporting more years in their current role compared to the other two groups, but fewer years in scouting as a youth, and fewer years in previous roles. The highly involved group had the highest likelihood of being in Order of the Arrow, compared to the other two groups (probability = .857).



Unstandardized Means: KEY	
PBGYRS	Total years as SM
PBGYSRL	# years in current role
PBGDIFYR	# Years in different role
PBGOTLDR	Previous roles served
PBGHGHLRD	Add'l higher roles
PBGSGYRS	Childhood years in BSA

Probability of endorsing Yes: KEY	
PBGOA	Order of the Arrow
RG1	Rank: Eagle with Palms
RG2	Rank: Eagle
RG3	Rank: Life Scout
RG4	Rank: Other (lower)

