Humans, even from infancy, are capable of statistical learning of linguistic information. However, it remains unclear which of the myriad algorithms for unsupervised learning actually captures human abilities. This matters because unsupervised learning algorithms vary greatly in terms of the extent and rate of learning. Thus, which algorithm(s) humans use may place a strong bound on how much of language can actually be learned in an unsupervised fashion. As a step towards more precisely characterizing human unsupervised learning capabilities, we use a meta-analysis to quantitatively synthesize the literature on adult statistical word segmentation. An exhaustive search yielded 130 papers comprising 229 experiments, for each of which we coded 27 commonly manipulated moderators; these include manipulations of lexical accent, length of training, number of words in language, and whether words were defined based on adjacent or non-adjacent segments. Meta-analytic regression revealed a handful of significant effects, including effects of foil type and syllable adjacency. However, moderators reaching significance were few and confidence intervals were very large in most cases. These findings are consistent with prior work suggesting low power and precision in the literature. Higher-powered studies will be needed to clearly establish robust, quantitative findings against which models can be evaluated.