The z-curve method requires exact p-values (e.g., $p = 0.002$) as input parameter. If the corresponding p-value is reported relatively (e.g., $p < 0.05$), the p-value will be recomputed where sufficient information is available (i.e., degrees of freedom and F-ratio or t-statistic). P-values will be recomputed in Microsoft Excel using the functions *T.DIST.2T* or *F.DIST.RT* for t-tests and F-tests, respectively. These functions require both the statistic test and degrees of freedom. In case where a t-statistic or F-ratio from a one-way ANOVA with two levels is reported but not the degrees of freedom, degrees of freedom will be estimated using the sample size per group and study design reported in the original study. For instance, in case the key statistical test is a within-subject t-test or a one-way within-subject ANOVA with two levels, we would calculate the degrees of freedom as N – 1. In case the statistical test is a between-subject (unpaired) t-test or a one-way between-subject ANOVA with two levels, we will calculate the degrees of freedom as N – 2. Once the degrees of freedom are calculated, the p-value will then be recomputed.

In case that the exact p-value and the corresponding t-statistic is not reported, but an effect size is available, authors will attempt to convert effect sizes into p-values for study designs involving a t-test. Converting the effect sizes into p-values is different depending on whether the authors present their effect sizes as Cohen's d, Cohen's d_z, or Hedges' g. To compute p-values for between-subject designs, it is necessary first to convert Hedges' g back into Cohen's d. The basic formula for the conversion given by Hedges (1984) will be used:

$$d = \frac{g}{c(m)}$$

where c(m) = 1 – (3/((4 * m), where m is the degrees of freedom for the study. m will be calculated as $N – 2$ for studies that used between-subjects designs and $N – 1$ for studies that used within-subjects designs. If Cohen's d is what the authors report in their study, then no conversion is necessary and the Cohen's d can be converted directly into a t-statistic.

If the t-statistic is from a between-subjects design and sample sizes for the treatment and control conditions are provided, it is converted to a t-score using the following formula:

$$t = \frac{d}{\sqrt{\frac{1}{n_1}+\frac{1}{n_2}}}$$

If the sample sizes for the treatment and control groups are *not* provided, the t-statistic will be calculated as follows:

$$t \approx \frac{d}{2} * \sqrt{n}$$

In the case of within-subjects designs, the Cohen's d_z will be converted to a t-statistic using the following formula:

$$t = d_z * \sqrt{n}.$$

If the statistical test is a one-way ANOVA with two levels, and F-ratios and degrees of freedom are reported, we will first compute η_p^2 as follows:

$$\eta_p^2 = \frac{F\ x\ DF\ effect}{F\ x\ DF\ effect + DF\ error}$$

And then η_p^2 will be converted to a Cohen's d using the following formula:

$$d = \frac{2 * \sqrt{n^2}}{\sqrt{1 - n_2}}$$

Note that for a one-way ANOVA with two levels, η_p^2 equals η^2. Thus, if the F-ratio is not reported, we could also estimate Cohen's *d* from either η_p^2 or η^2. Finally, we won't attempt to compute other ANOVA effect sizes (i.e., ω^2, ω_p^2) because they require information that is seldom reported in published studies such as mean-square (MS) and sum-of-squares (SS) errors. If we are unable to recompute a *p*-value reported relatively (e.g., $p < 0.05$) by any of above procedures, the *p*-value will not be included in the z-curve analysis.