Supplement 1

Table 1: The modified Jadad scale.

Eight items	Answer	Score
Was the study described as randomized?	Yes	**+1**
	No	**0**
Was the method of randomization appropriate?	Yes	**+1**
	No	**-1**
	Not described	**0**
Was the study described as blinding? [a]	Yes	**+1**
	No	**0**
Was the method of blinding appropriate?	Yes	**+1**
	No	**-1**
	Not described	**0**
Was there a description of withdrawals and dropouts?	Yes	**+1**
	No	**0**
Was there a clear description of the inclusion/exclusion criteria?	Yes	**+1**
	No	**0**

Was the method used to assess adverse effects described?	Yes	**+1**
	No	**0**
Was the methods of statistical analysis described?	Yes	**+1**
	No	**0**

a: double-blind got 1 score, single-blind got 0.5 score.

Table 2: Modified Jadad scores of the included studies.

Corresponding author	Was the research described as randomized? #	Was the approachof randomization appropriate?*	Was the research described as blinding? #	Was the approach of blinding appropriate? *	Was there a presentation of withdrawals and dropouts?#	Was there a presentation of the inclusion/exclusion criteria?#	Was the approach used to assess adverse effects described? #	Was the approach of statistical analysis described? #	Total
Baghaie.M, 2003	1	0	0	0	1	1	1	1	**5**
Koleini.N, 2004	1	1	0	0	1	1	1	1	**6**
Sadr Lahijani M.S, 2004	0	0	0	0	1	1	0	1	**3**
Fereshteh aein, 2005	1	1	0	0	1	1	0	1	**5**
Hassanpour Dehkordi, 2006	1	1	0	0	1	1	0	1	**5**
A.A. Khaki, 2007	0	0	0	0	1	1	1	0	**3**
Kermanian.F, 2008	1	1	0	0	1	1	1	1	**6**
Khami.M, 2009	1	1	0	0	1	1	1	1	**6**

Moghimian.M, 2010	1	1	0	0	1	1	1	0	**5**
Namnabati.M, 2010	0	0	0	0	1	1	0	0	**2**
Modanloo.M, 2010	1	0	0	0	1	1	1	0	**4**
Momeni Danaei.Sh, 2010	0	0	0	0	1	1	0	1	**3**
MA Hajbaghery, 2012	1	0	0	0	1	1	1	0	**4**
Naghavi Behzad.M, 2012	0	0	0	0	1	1	1	1	**4**
Panjehpour.M, 2012	0	0	0	0	1	1	0	0	**2**
Penjvini.S, 2013	1	0	0	0	1	1	1	1	**5**
Khatiban.M, 2013	1	0	0	0	1	1	1	1	**5**
Assadi.S.N, 2013	1	0	0	0	1	1	1	1	**5**
Dehghani.S.M, 2013	1	1	0	0	1	1	1	1	**6**

Sangestani.G, 2014	1	0	0	0	1	1	1	1	**5**
Sadeghzadeh.M , 2014	1	1	0	0	1	1	0	0	**3**
Rezaie.M.J, 2014	0	0	0	0	1	1	1	1	**4**
Jahanbani.J, 2015	0	0	0	0	1	1	1	0	**3**

Supplement 2

Figure 1: Subgroup analysis considering various learning method comparison

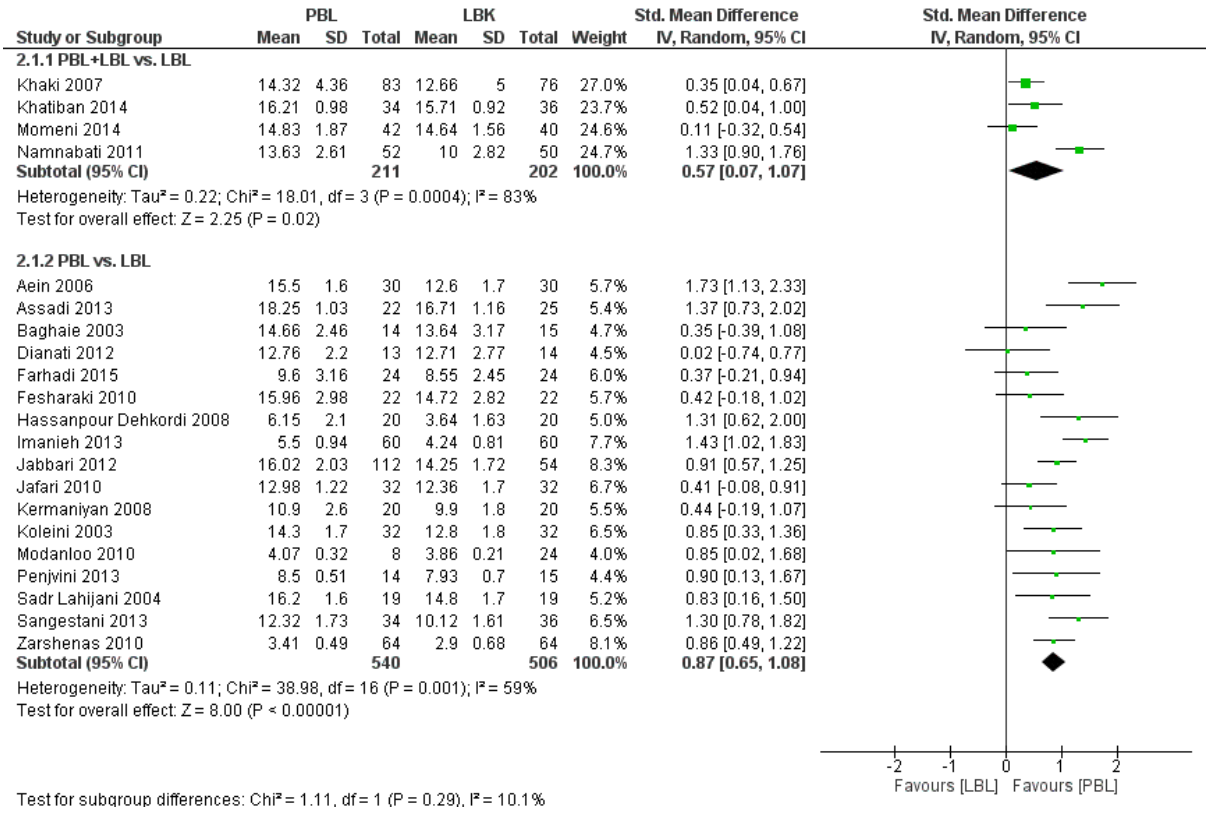


Figure 2: Subgroup analysis considering various discipline comparison

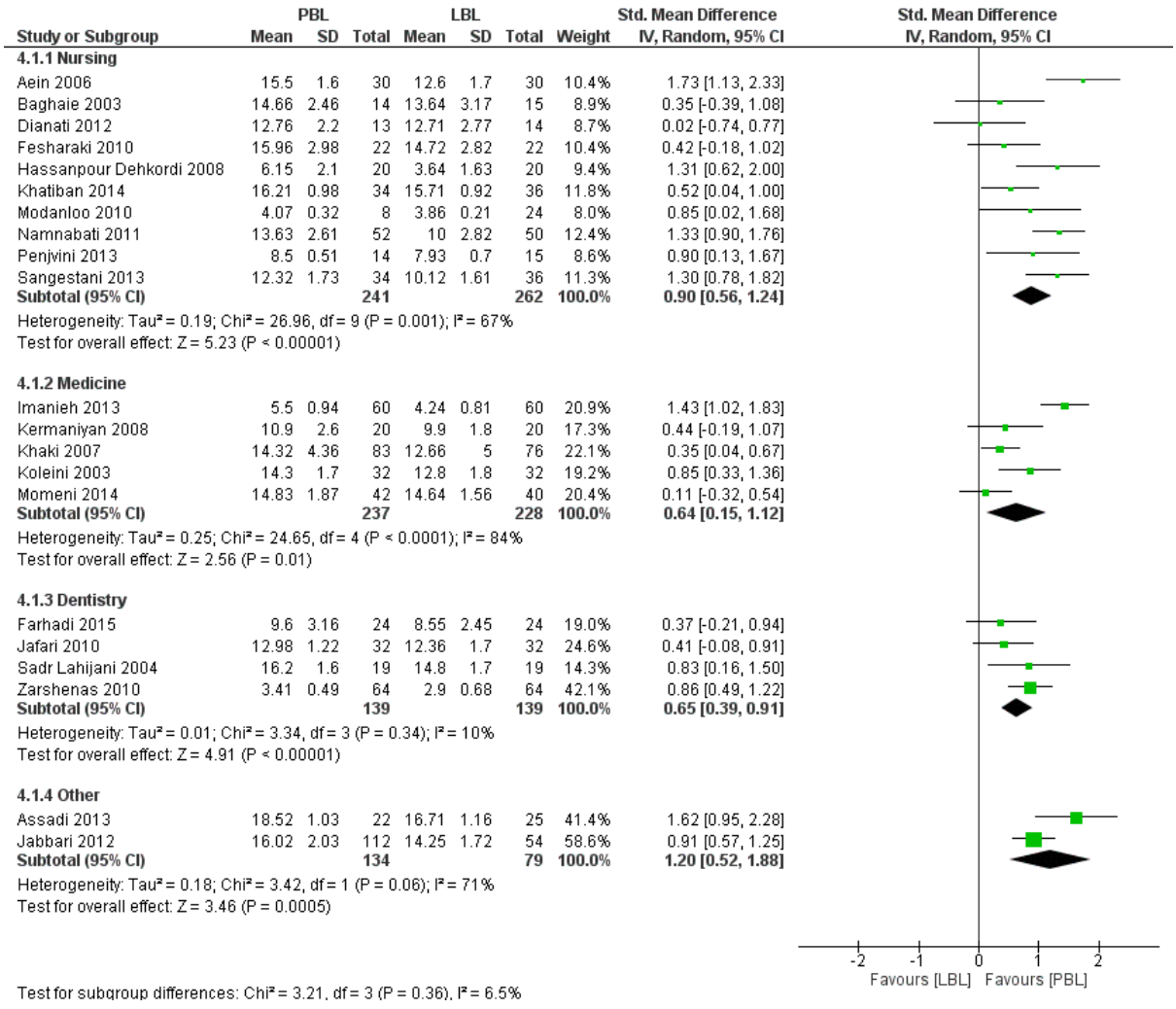


Figure 3: Subgroup analysis considering various grades comparison

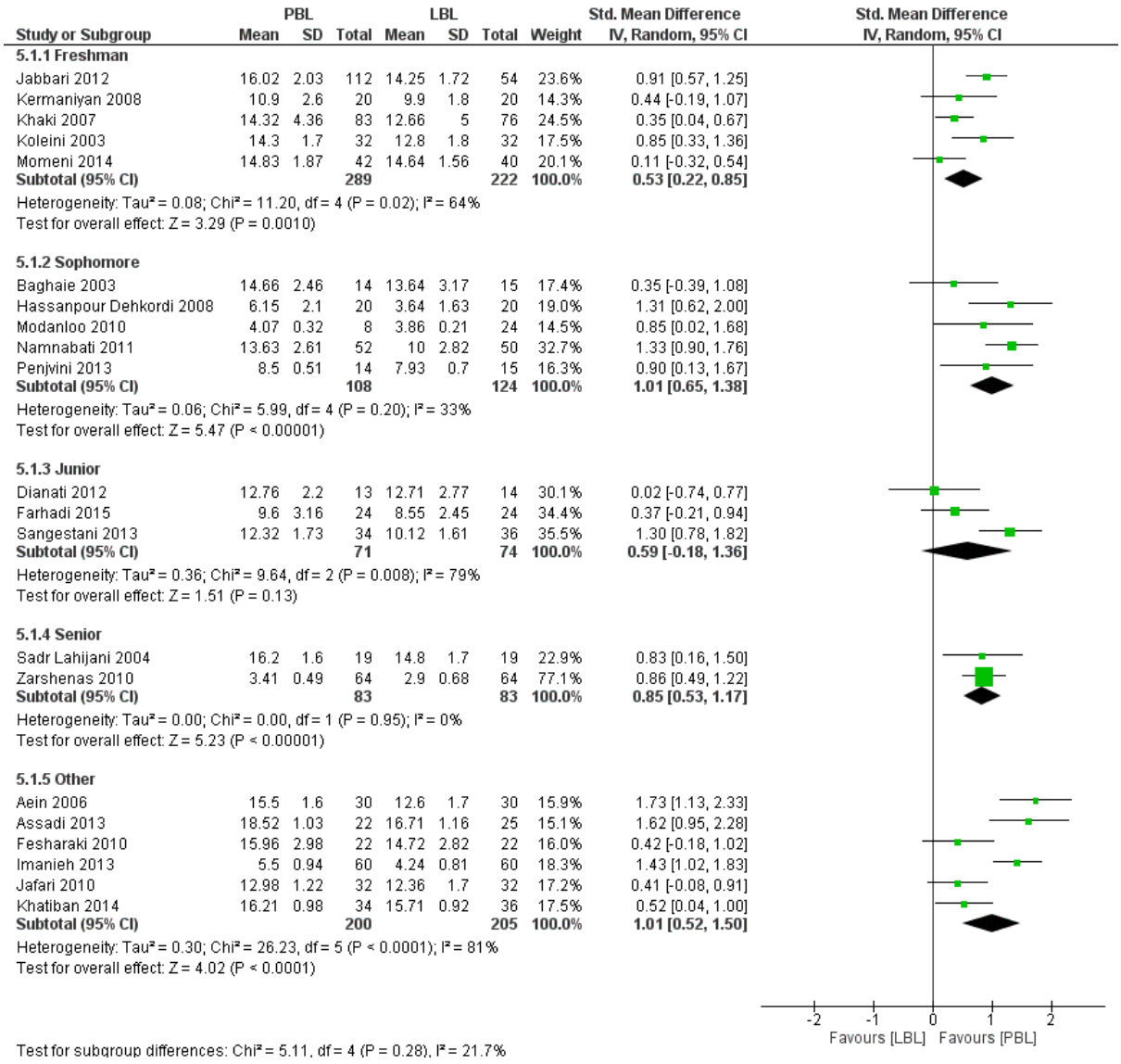
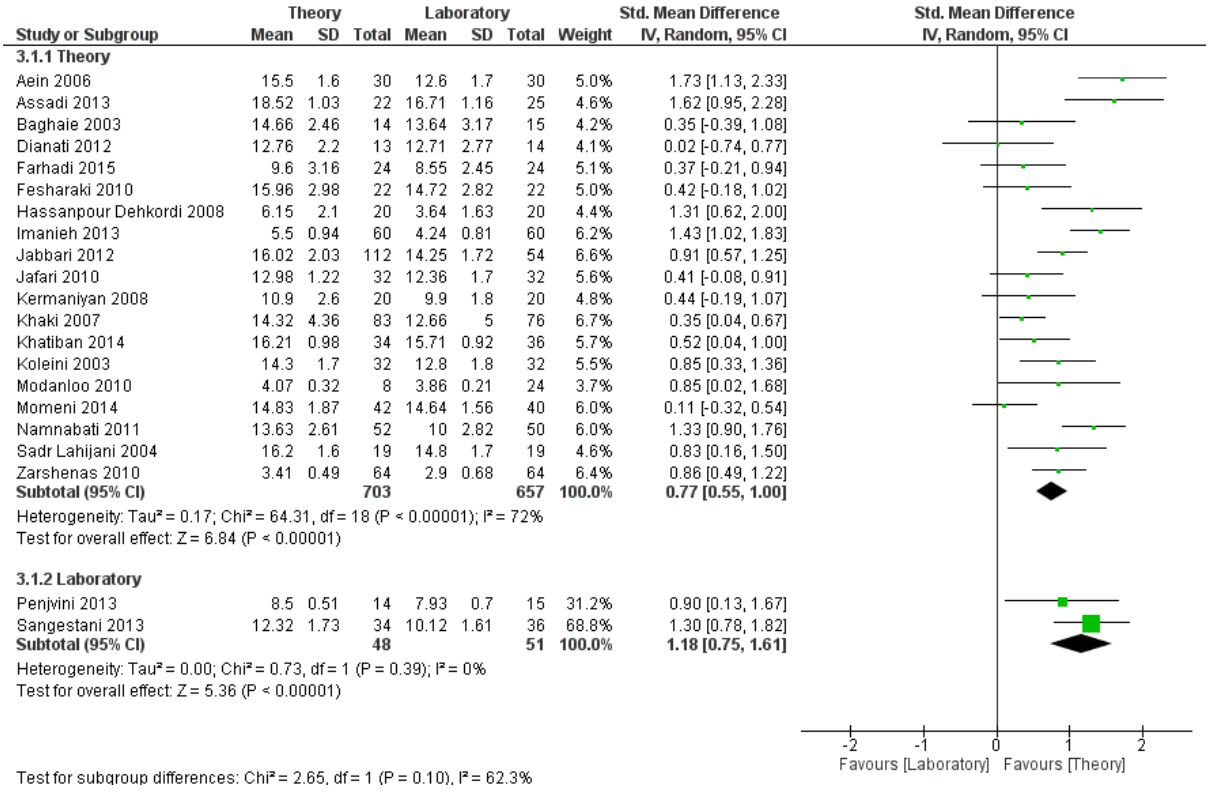


Figure 4: Subgroup analysis considering various study subjects comparison



Supplement 3

Figure 1: The funnel plot for the included studies based on the various learning method comparison

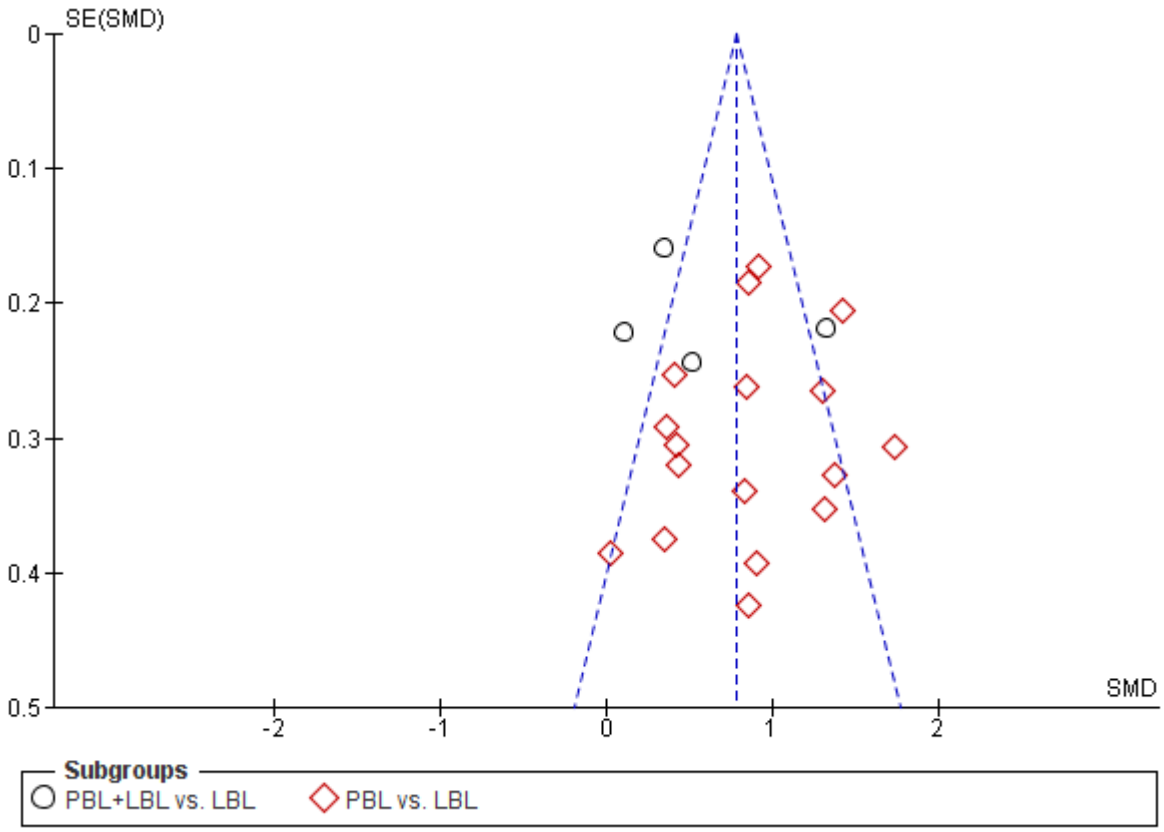


Figure 2: The funnel plot for the included studies based on the discipline comparison

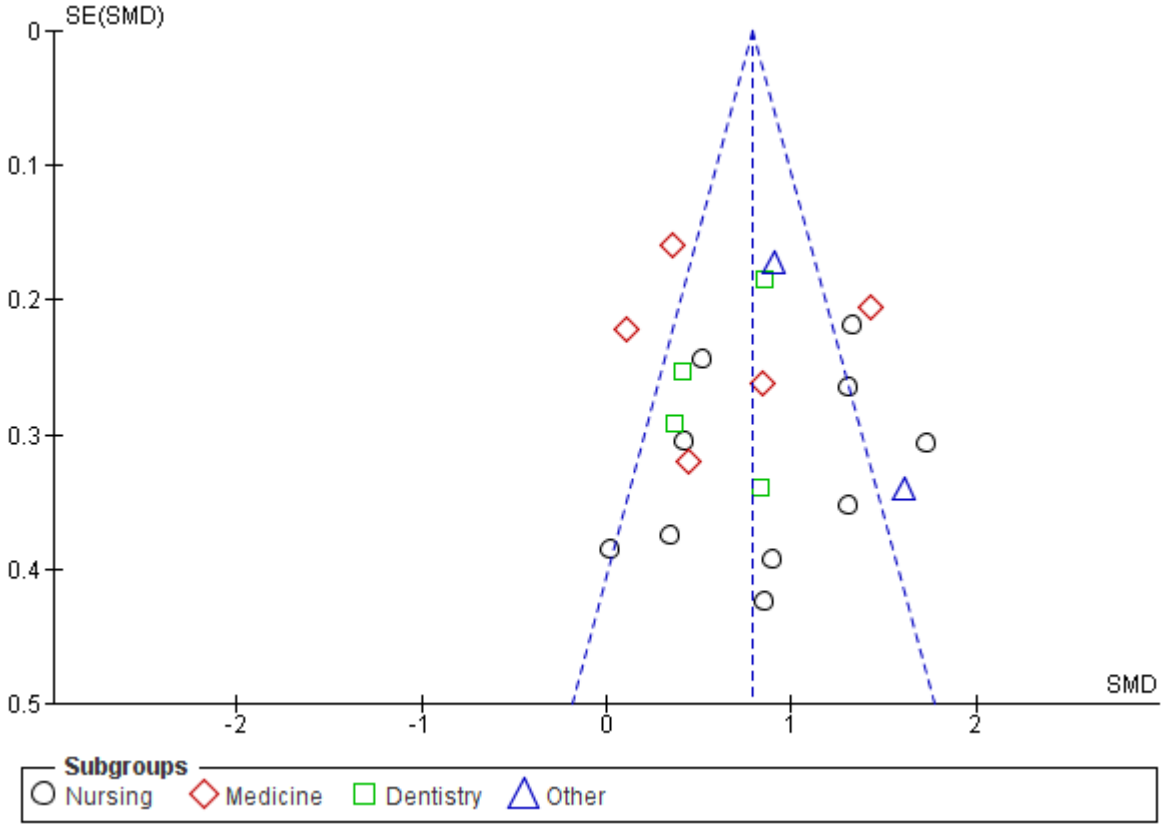


Figure 3: The funnel plot for the included studies based on the various grades comparison

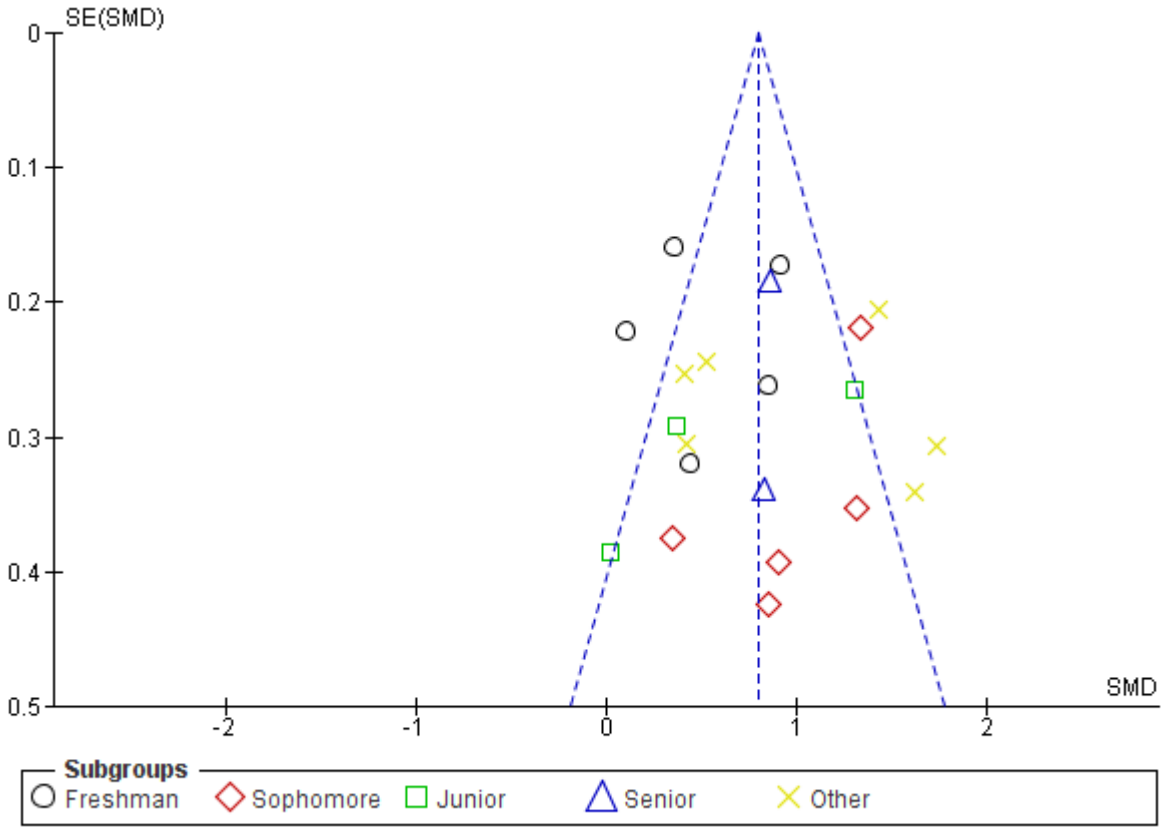
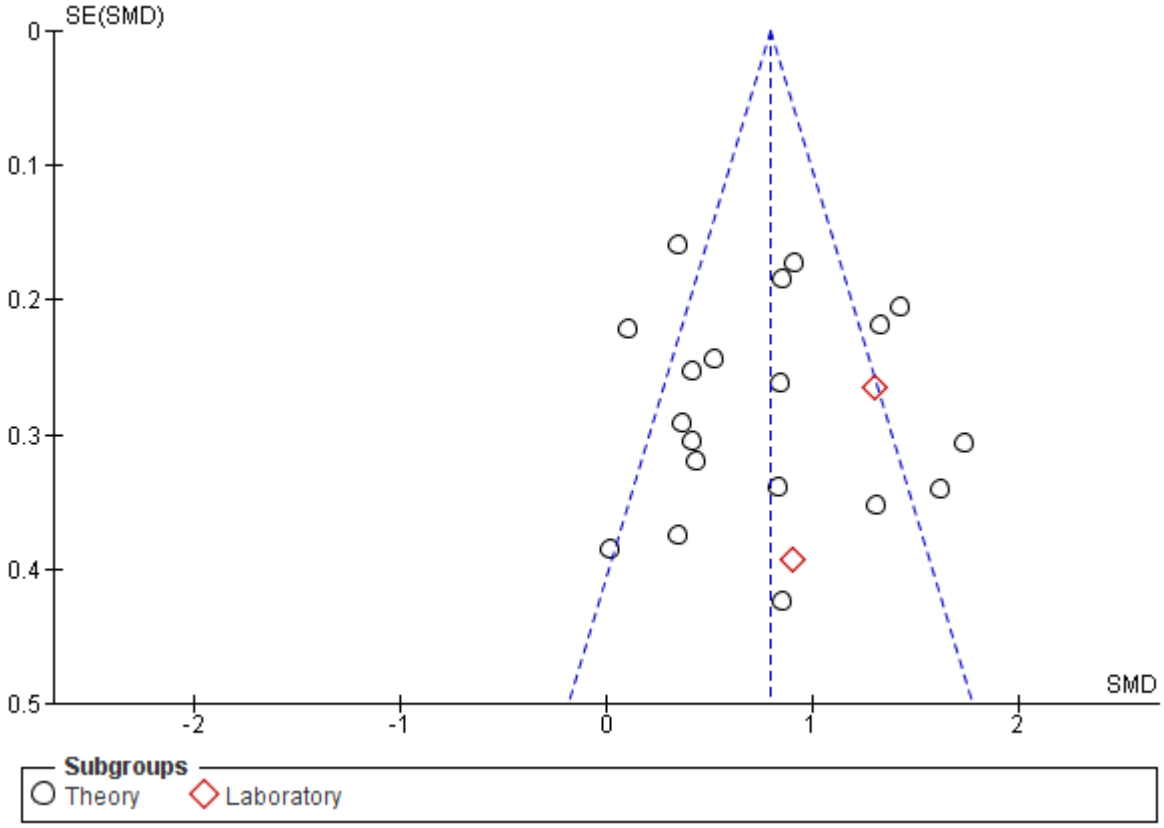



Figure 4: The funnel plot for the included studies based on the various study subjects comparison