

SUPPLEMENTARY MATERIALS

The Clinical Features of Fundus Tessellation and Its Relationship with Myopia: A Systematic Review and Meta-analysis

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The Agency for Healthcare Research and Quality (AHRQ) was used to assess the following aspects of the cross-sectional study: whether the sources of data were clearly defined; whether the inclusion and exclusion criteria for exposed and non-exposed groups are listed or refer to previous publications; whether the time period for identifying patients is given; whether the study population is continuous, if not population-based; whether the subjective factors of the evaluator cover up other aspects of the research object; describes any assessment performed for quality assurance; explain the reasons for excluding any patients from the analysis; how to evaluate and control the confounding factors; if possible, explain how data were missing from the analysis; the response rate of patients and the integrity of data collection were summarized; if by follow-up, identify the percentage of expected patients with incomplete data or follow-up results.

Supplementary TABLE 1 Quality of the included studies assessed by the Agency for Healthcare Research and Quality (AHRQ)

Study	Year of publication	Define the source of information (survey, record review)	List inclusion and exclusion criteria for exposed and unexposed subjects (cases and controls) or refer to previous publications	Indicate time period used for identifying patients	Indicate whether or not subjects were consecutive if not population-based	Indicate if evaluators of subjective components of study were masked to other aspects of the status of the participants	Describe any assessments undertaken for quality assurance purposes	Explain any patient exclusions from analysis	Describe how confounding was assessed and/or controlled	If applicable, explain how missing data were handled in the analysis	Summarize patient response rates and completeness of data collection	Clarify what follow-up, if any, was expected and the percentage of patients
Yoshihara et al	2014	yes		yes	no	no	yes	yes	yes		yes	
Terasaki et al	2016	yes		yes	no	no	yes	yes	yes		yes	
Zhou et al	2018	yes		no	no	no	yes	yes			yes	
Choudhury et al	2018	yes		yes	yes	no	yes	no	yes		yes	
Yan et al	2018	yes		yes	yes	no	yes	yes		yes	yes	yes
Yamashita et al	2018	yes		yes	yes	no	yes	yes			yes	
Fang et al	2019	yes		yes	no	no	yes	yes	yes		yes	
Hopf et al	2019	yes	yes	yes	yes	no	yes	yes		yes	yes	
Guo et al	2019	yes		yes	yes	no	yes	yes	yes		yes	
Yamashita et al	2020	yes		yes	no	no	yes	yes	yes		yes	
Lyu et al	2021	yes		yes	no	no	yes	yes	yes		yes	
He et al	2021	yes		yes	yes	no	yes	no		yes	yes	
Shao et al	2021	yes		yes	yes	no	yes	no			yes	yes
Cheng et al	2021	yes		no	no	no	yes	yes	yes		yes	
Gong et al	2022	yes		yes	no	no	yes	yes	yes		yes	

(a) All patients

Study or Subgroup	tessellated			normal			Weight	Mean Difference IV, Random, 95% CI
	Mean	SD	Total	Mean	SD	Total		
Chen et al 2012	39.3	14.7	56	31.8	16.2	161	0.0%	7.50 [2.91, 12.09]
Fang et al 2019	46.1	18.8	266	28.7	18.5	18	8.2%	17.40 [8.56, 26.24]
He et al 2021	12.75	3.17	67	11.93	3.16	56	21.0%	0.82 [-0.30, 1.94]
Lyu et al 2021	19.82	2.66	718	19.86	2.2	78	21.4%	-0.04 [-0.57, 0.49]
Xiao et al 2018	24.9	12.5	177	16.9	6.2	504	20.0%	8.00 [6.08, 9.92]
Zhao et al 2020	43.29	14.86	779	32.6	18.1	58	14.6%	10.69 [5.92, 15.46]
Zhou et al 2018	34.3	10.5	93	37.2	9.9	22	14.8%	-2.90 [-7.55, 1.75]
Total (95% CI)			2100			736	100.0%	4.32 [1.11, 7.53]

Heterogeneity: $\tau^2 = 12.46$; $\chi^2 = 96.05$, $df = 5$ ($P < 0.00001$); $I^2 = 95\%$
 Test for overall effect: $Z = 2.64$ ($P = 0.008$)

(b) Patients with a positive result for the first subgroup

Study or Subgroup	tessellated			normal			Weight	Mean Difference IV, Random, 95% CI
	Mean	SD	Total	Mean	SD	Total		
Chen et al 2012	39.3	14.7	56	31.8	16.2	161	13.8%	7.50 [2.91, 12.09]
Fang et al 2019	46.1	18.8	266	28.7	18.5	18	0.0%	17.40 [8.56, 26.24]
He et al 2021	12.75	3.17	67	11.93	3.16	56	19.9%	0.82 [-0.30, 1.94]
Lyu et al 2021	19.82	2.66	718	19.86	2.2	78	20.3%	-0.04 [-0.57, 0.49]
Xiao et al 2018	24.9	12.5	177	16.9	6.2	504	18.9%	8.00 [6.08, 9.92]
Zhao et al 2020	43.29	14.86	779	32.6	18.1	58	13.5%	10.69 [5.92, 15.46]
Zhou et al 2018	34.3	10.5	93	37.2	9.9	22	13.7%	-2.90 [-7.55, 1.75]
Total (95% CI)			1890			879	100.0%	3.74 [0.75, 6.73]

Heterogeneity: $\tau^2 = 11.41$; $\chi^2 = 90.77$, $df = 5$ ($P < 0.00001$); $I^2 = 94\%$
 Test for overall effect: $Z = 2.45$ ($P = 0.01$)

(c) Patients with a positive result for the second subgroup

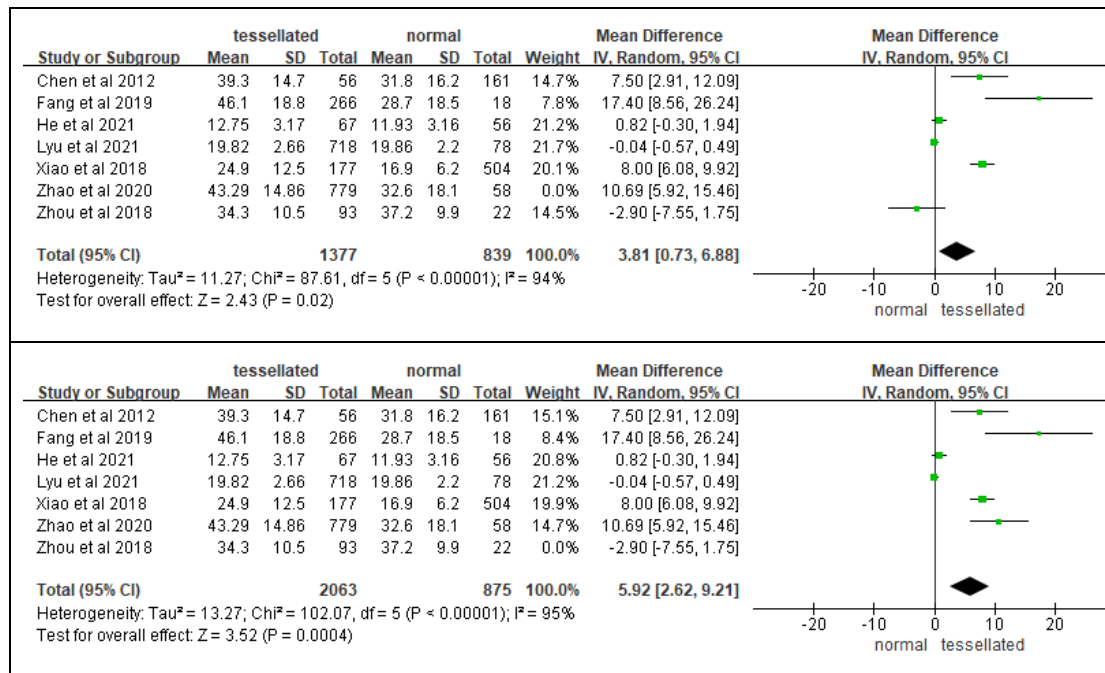
Study or Subgroup	tessellated			normal			Weight	Mean Difference IV, Random, 95% CI
	Mean	SD	Total	Mean	SD	Total		
Chen et al 2012	39.3	14.7	56	31.8	16.2	161	16.7%	7.50 [2.91, 12.09]
Fang et al 2019	46.1	18.8	266	28.7	18.5	18	12.0%	17.40 [8.56, 26.24]
He et al 2021	12.75	3.17	67	11.93	3.16	56	0.0%	0.82 [-0.30, 1.94]
Lyu et al 2021	19.82	2.66	718	19.86	2.2	78	19.4%	-0.04 [-0.57, 0.49]
Xiao et al 2018	24.9	12.5	177	16.9	6.2	504	18.9%	8.00 [6.08, 9.92]
Zhao et al 2020	43.29	14.86	779	32.6	18.1	58	16.5%	10.69 [5.92, 15.46]
Zhou et al 2018	34.3	10.5	93	37.2	9.9	22	16.6%	-2.90 [-7.55, 1.75]
Total (95% CI)			2089			841	100.0%	6.13 [1.15, 11.10]

Heterogeneity: $\tau^2 = 33.20$; $\chi^2 = 104.43$, $df = 5$ ($P < 0.00001$); $I^2 = 95\%$
 Test for overall effect: $Z = 2.41$ ($P = 0.02$)

(d) Patients with a positive result for the third subgroup

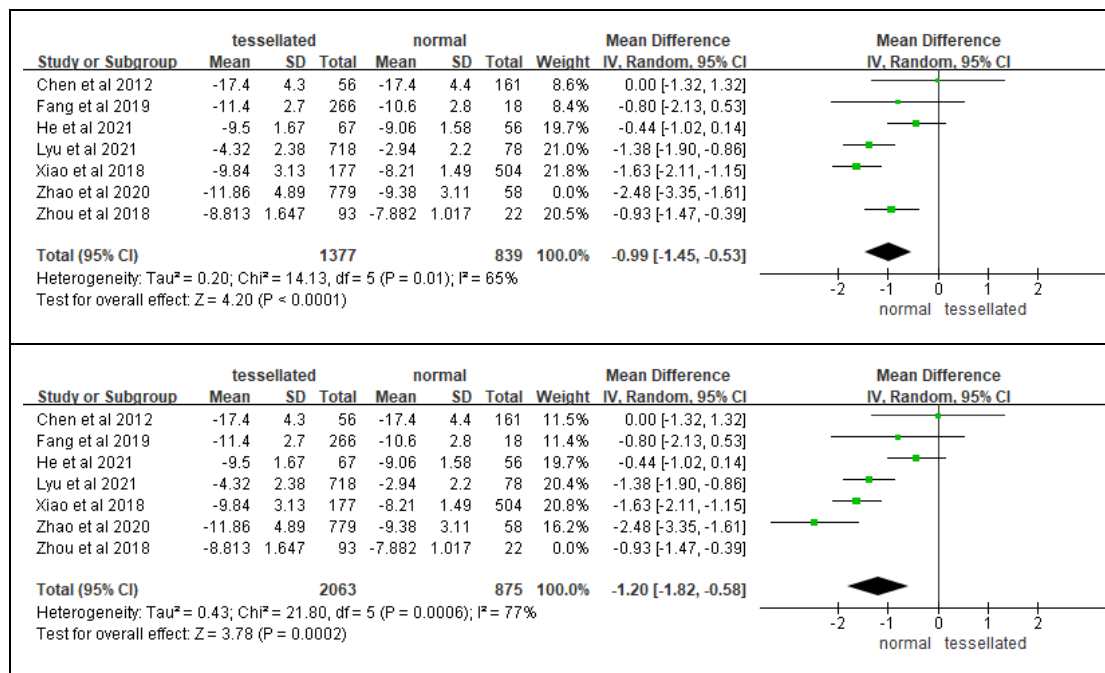
Study or Subgroup	tessellated			normal			Weight	Mean Difference IV, Random, 95% CI
	Mean	SD	Total	Mean	SD	Total		
Chen et al 2012	39.3	14.7	56	31.8	16.2	161	14.5%	7.50 [2.91, 12.09]
Fang et al 2019	46.1	18.8	266	28.7	18.5	18	6.6%	17.40 [8.56, 26.24]
He et al 2021	12.75	3.17	67	11.93	3.16	56	24.8%	0.82 [-0.30, 1.94]
Lyu et al 2021	19.82	2.66	718	19.86	2.2	78	25.7%	-0.04 [-0.57, 0.49]
Xiao et al 2018	24.9	12.5	177	16.9	6.2	504	0.0%	8.00 [6.08, 9.92]
Zhao et al 2020	43.29	14.86	779	32.6	18.1	58	14.0%	10.69 [5.92, 15.46]
Zhou et al 2018	34.3	10.5	93	37.2	9.9	22	14.3%	-2.90 [-7.55, 1.75]
Total (95% CI)			1979			393	100.0%	3.51 [0.88, 6.14]

Heterogeneity: $\tau^2 = 6.92$; $\chi^2 = 46.26$, $df = 5$ ($P < 0.00001$); $I^2 = 89\%$
 Test for overall effect: $Z = 2.62$ ($P = 0.009$)



Supplementary Figure 1. Illustrating the Method for Systematic Exclusion of Studies: Re-evaluating Heterogeneity in the Meta-analysis of Age-Related Differences in Tessellated and Normal Fundus.

Supplementary Figure 1 displays the results of a methodological approach applied to assess the impact of systematically excluding individual studies on the heterogeneity within the meta-analysis. The method aimed to re-evaluate the extent of heterogeneity in the pooled dataset. The analysis revealed that despite the systematic exclusion of studies, there was no statistically significant reduction in heterogeneity when the I^2 statistic was greater than 50%. This suggests that the observed heterogeneity in the meta-analysis remained substantial even after selectively excluding specific studies from the analysis.



Supplementary Figure 2. Illustrating the Method for Systematic Exclusion of Studies: Re-evaluating Heterogeneity in the Meta-analysis of Spherical Equivalent (SE)-Related Differences in Tessellated and Normal Fundus.

Supplementary Figure 2 displays the results of a methodological approach applied to assess the impact of systematically excluding individual studies on the heterogeneity within the meta-analysis. The method aimed to re-evaluate the extent of heterogeneity in the pooled dataset. The analysis revealed that despite the systematic exclusion of studies, there was no statistically significant reduction in heterogeneity when the I^2 statistic was greater than 50%. This suggests that the observed heterogeneity in the meta-analysis remained substantial even after selectively excluding specific studies from the analysis.