

Lampiran 5. Hasil Penelitian DMT CORE



FAKULTAS KEDOKTERAN GIGI
DENTAL MATERIAL TESTING & CENTER OF RESEARCH
JL. KYAI TAPA 260, KAMPUS B USAKTI, LANTAI 4.
GROGOL JAKARTA BARAT, 11440.
TELP : 021 5672731, EMAIL : bkgdmt.usakti@gmail.com

LAPORAN PENELITIAN DMT CORE

Nama Peneliti : Felicia Sucanto
NIM : 040002000034
Judul Penelitian : Pengaruh Pasta Gigi Arang dan Bubuk Gigi *Whitening* terhadap Perubahan Warna Resin Komposit *Nanofiller* (Pasca Perendaman dalam Teh Hitam)
Tanggal Penelitian : 29 September – 3 November 2023

- Pengujian Warna 1 (Sebelum)

Kelompok	Sampel	Shade	ΔE
1	1	B2	6.7
1	2	B2	9
1	3	B2	8.1
1	4	B2	9.6
Rata - rata			8.3
2	5	B2	7.3
2	6	B2	7.4
2	7	B2	8.2
2	8	B2	8.9
Rata - rata			7.9
3 (kontrol)	9	B2	8.9
3 (kontrol)	10	B2	8.8
3 (kontrol)	11	B2	8.7
3 (kontrol)	12	B2	8.9
Rata - rata			8.3

Dilakukan pengukuran warna sampel resin komposit sebelum di rendam

- Pengujian Warna 2 (Sebelum)

Kelompok	Sampel	Shade	ΔE
1	1	A3	4.8
1	2	A3	6.1
1	3	A3	4.6
1	4	A3	5.6
Rata - rata			5.2
2	5	A3	5.4
2	6	A3	6.4
2	7	A3	6.1
2	8	A3	5.9
Rata - rata			5.9
3 (kontrol)	9	A3	5.9
3 (kontrol)	10	A3	5.8
3 (kontrol)	11	A3	5.4
3 (kontrol)	12	A3	5.6
Rata - rata			5.6

Dilakukan pengukuran warna sampel setelah perendaman dalam teh hitam selama 5 dan 8 hari

• **Pengujian Warna 3 (Sesudah)**

Kelompok	Sampel	Shade	ΔE
1	1	A3	8.8
1	2	A3	7.5
1	3	A2	7.8
1	4	A2	9.6
Rata - rata			8.4
2	5	A3	6.9
2	6	A3	6.9
2	7	A3	7.5
2	8	A2	6.6
Rata - rata			6.9
3 (kontrol)	9	A2	7.6
3 (kontrol)	10	A2	7.7
3 (kontrol)	11	A3	8.7
3 (kontrol)	12	A3	8.7
Rata - rata			8.1

Dilakukan pengukuran warna sampel setelah penyikatan pada masing-masing kelompok menggunakan pasta gigi selama 5 dan 8 hari

• **Rata-rata ΔE**

Kelompok	Sampel	Rata-rata
1	1	7.3
1	2	
1	3	
1	4	
2	5	6.9
2	6	
2	7	
2	8	
3 (kontrol)	9	7.3
3 (kontrol)	10	
3 (kontrol)	11	
3 (kontrol)	12	

KESIMPULAN

Terdapat perubahan warna pada sampel resin komposit setelah dilakukan perendaman teh hitam dan setelah penyikatan menggunakan pasta gigi pemutih

Pembimbing Lab DMT CORE

(drg. Tansza Permata Setiana Putri, Ph.D)

Lampiran 7. Hasil Uji Statistik

a. Uji Normalitas *Shapiro-Wilk*

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Variabel E sebelum perendaman - kelompok I	.197	4	.	.963	4	.795
Variabel L sebelum perendaman - kelompok I	.205	4	.	.938	4	.645
Variabel C sebelum perendaman - kelompok I	.181	4	.	.984	4	.925
Variabel H sebelum perendaman - kelompok I	.191	4	.	.979	4	.894
Variabel E sebelum perendaman - kelompok II	.268	4	.	.899	4	.427
Variabel L sebelum perendaman - kelompok II	.230	4	.	.936	4	.630
Variabel C sebelum perendaman - kelompok II	.270	4	.	.947	4	.697
Variabel E sebelum perendaman - kelompok I	.236	4	.	.940	4	.653
Variabel E sebelum perendaman - kelompok III	.283	4	.	.863	4	.272
Variabel L sebelum perendaman - kelompok III	.351	4	.	.847	4	.216
Variabel C sebelum perendaman - kelompok III	.300	4	.	.842	4	.200
Variabel H sebelum perendaman - kelompok III	.283	4	.	.863	4	.272

a. Lilliefors Significance Correction

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Variabel E setelah perendaman - kelompok I	.251	4	.	.923	4	.555
Variabel L setelah perendaman - kelompok I	.343	4	.	.835	4	.182
Variabel C setelah perendaman - kelompok I	.293	4	.	.918	4	.528
Variabel H setelah perendaman - kelompok I	.257	4	.	.842	4	.202
Variabel E setelah perendaman - kelompok II	.203	4	.	.980	4	.899
Variabel L setelah perendaman - kelompok II	.312	4	.	.783	4	.075
Variabel C setelah perendaman - kelompok II	.261	4	.	.909	4	.477
Variabel E setelah perendaman - kelompok I	.252	4	.	.916	4	.513
Variabel E setelah perendaman - kelompok III	.214	4	.	.963	4	.798
Variabel L setelah perendaman - kelompok III	.236	4	.	.911	4	.488
Variabel C setelah perendaman - kelompok III	.281	4	.	.812	4	.126
Variabel H setelah perendaman - kelompok III	.298	4	.	.849	4	.224

a. Lilliefors Significance Correction

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Variabel E setelah penyikatan - kelompok I	.242	4	.	.936	4	.631
Variabel L setelah penyikatan - kelompok I	.235	4	.	.952	4	.731
Variabel C setelah penyikatan - kelompok I	.283	4	.	.863	4	.272
Variabel H setelah penyikatan - kelompok I	.293	4	.	.810	4	.122
Variabel E setelah penyikatan - kelompok II	.329	4	.	.895	4	.406
Variabel L setelah penyikatan - kelompok II	.241	4	.	.877	4	.324
Variabel C setelah penyikatan - kelompok II	.234	4	.	.948	4	.702
Variabel H setelah penyikatan - kelompok I	.229	4	.	.895	4	.404
Variabel E setelah penyikatan - kelompok III	.306	4	.	.768	4	.056
Variabel L setelah penyikatan - kelompok III	.364	4	.	.840	4	.195
Variabel C setelah penyikatan - kelompok III	.222	4	.	.970	4	.842
Variabel H setelah penyikatan - kelompok III	.294	4	.	.817	4	.135

a. Lilliefors Significance Correction

b. Uji Repeated ANOVA

Descriptive Statistics

	Mean	Std. Deviation	N
Pasta gigi arang	8.425	.9605	4
Bubuk gigi whitening	6.975	.3775	4
Pasta gigi tanpa pemutih	8.175	.6076	4

Mauchly's Test of Sphericity^a

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon ^b		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
DeltaE	.535	1.249	2	.535	.683	1.000	.500

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept
Within Subjects Design: DeltaE

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
DeltaE	Sphericity Assumed	4.807	2	2.403	4.961	.054	.623
	Greenhouse-Geisser	4.807	1.366	3.520	4.961	.085	.623
	Huynh-Feldt	4.807	2.000	2.403	4.961	.054	.623
	Lower-bound	4.807	1.000	4.807	4.961	.112	.623
Error(DeltaE)	Sphericity Assumed	2.907	6	.484			
	Greenhouse-Geisser	2.907	4.097	.709			
	Huynh-Feldt	2.907	6.000	.484			
	Lower-bound	2.907	3.000	.969			

Descriptive Statistics

	Mean	Std. Deviation	N
Pasta gigi arang	7.475	.6801	4
Bubuk gigi whitening	6.100	2.0083	4
Pasta gigi tanpa pemutih	7.350	.1732	4

Mauchly's Test of Sphericity^a

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon ^b		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
DeltaL	.295	2.441	2	.295	.587	.737	.500

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept

Within Subjects Design: DeltaL

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
DeltaL	Sphericity Assumed	4.625	2	2.312	1.318	.335	.305
	Greenhouse-Geisser	4.625	1.173	3.942	1.318	.336	.305
	Huynh-Feldt	4.625	1.474	3.138	1.318	.337	.305
	Lower-bound	4.625	1.000	4.625	1.318	.334	.305
Error(DeltaL)	Sphericity Assumed	10.528	6	1.755			
	Greenhouse-Geisser	10.528	3.519	2.992			
	Huynh-Feldt	10.528	4.421	2.381			
	Lower-bound	10.528	3.000	3.509			

Descriptive Statistics

	Mean	Std. Deviation	N
Pasta gigi arang	2.050	1.1619	4
Bubuk gigi whitening	.625	.4500	4
Pasta gigi tanpa pemutih	1.650	1.3478	4

Mauchly's Test of Sphericity^a

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon ^b		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
DeltaH	.254	2.737	2	.254	.573	.697	.500

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept
Within Subjects Design: DeltaH

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
DeltaH	Sphericity Assumed	4.322	2	2.161	1.422	.312	.322
	Greenhouse-Geisser	4.322	1.146	3.772	1.422	.319	.322
	Huynh-Feldt	4.322	1.393	3.102	1.422	.318	.322
	Lower-bound	4.322	1.000	4.322	1.422	.319	.322
Error(DeltaH)	Sphericity Assumed	9.118	6	1.520			
	Greenhouse-Geisser	9.118	3.437	2.653			
	Huynh-Feldt	9.118	4.179	2.182			
	Lower-bound	9.118	3.000	3.039			

Descriptive Statistics

	Mean	Std. Deviation	N
Pasta gigi arang	4.525	.0957	4
Bubuk gigi whitening	3.050	1.2819	4
Pasta gigi tanpa pemutih	4.950	.7141	4

Mauchly's Test of Sphericity^a

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon ^b		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
DeltaC	.682	.766	2	.682	.759	1.000	.500

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept
Within Subjects Design: DeltaC

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
DeltaC	Sphericity Assumed	7.955	2	3.977	5.999	.037	.667
	Greenhouse-Geisser	7.955	1.517	5.244	5.999	.057	.667
	Huynh-Feldt	7.955	2.000	3.977	5.999	.037	.667
	Lower-bound	7.955	1.000	7.955	5.999	.092	.667
Error(DeltaC)	Sphericity Assumed	3.978	6	.663			
	Greenhouse-Geisser	3.978	4.551	.874			
	Huynh-Feldt	3.978	6.000	.663			
	Lower-bound	3.978	3.000	1.326			

c. Pengukuran pH Teh Hitam

Hari	ph Teh Hitam	pH Akuades
1	6,2	7,0
2	6,4	7,0
3	5,3	7,0
4	5,2	7,0
5	5,4	7,0
6	6,8	7,0
7	6,3	7,0
8	6,3	7,0
9	6,4	7,0
10	6,1	7,0
11	6,7	7,0
12	7,0	7,0
13	6,9	7,0
Rerata ± SD	6,2 ± 0,5	7 ± 0