

Supplementary material

S1

Subsample Statistics

Subsample 1 (1956 participants; 990 women, 923 men, 21 diverse, and 22 not reporting their sex) was recruited in preselected university classes from different fields of study and different disciplines to recruit participants with diverse/varying backgrounds and, thus, reduce group-specific effects. The final selection of classes was dependent on the lecturers' agreement to allocate time for our study during class, at either the beginning or the end of the class. Most of the participants ($n = 1736$) reported German as their only mother tongue; an additional 87 participants reported German and another language as their mother tongue. The majority ($n = 1813$) indicated no expertise in the field of materials.

The acquisition of Subsample 2 (496 participants; 262 female, 234 male) was dependent on the agreement of the citizen centers and vehicle registration authorities to have the study conducted on their premises. Most of the participants ($n = 420$) reported German as their only mother tongue; an additional 27 participants reported German and another language as their mother tongue. The majority ($n = 458$) indicated no expertise in the field of materials.

The two subsamples did not differ significantly in their frequency distributions for the ten categories of materials, $\chi^2(9) = 11.02, p = .28$, or in their proportions of men and women, $\chi^2(1) = 0.14, p = .71$. However, the participants in Subsample 1 were significantly younger than the participants in Subsample 2: 21.9 years ($SD = 5.2$), ranging from 16 to 75, vs. 38.7 years ($SD = 16.4$), ranging from 16 to 92, $t(2398) = 37.8, p < .001$.

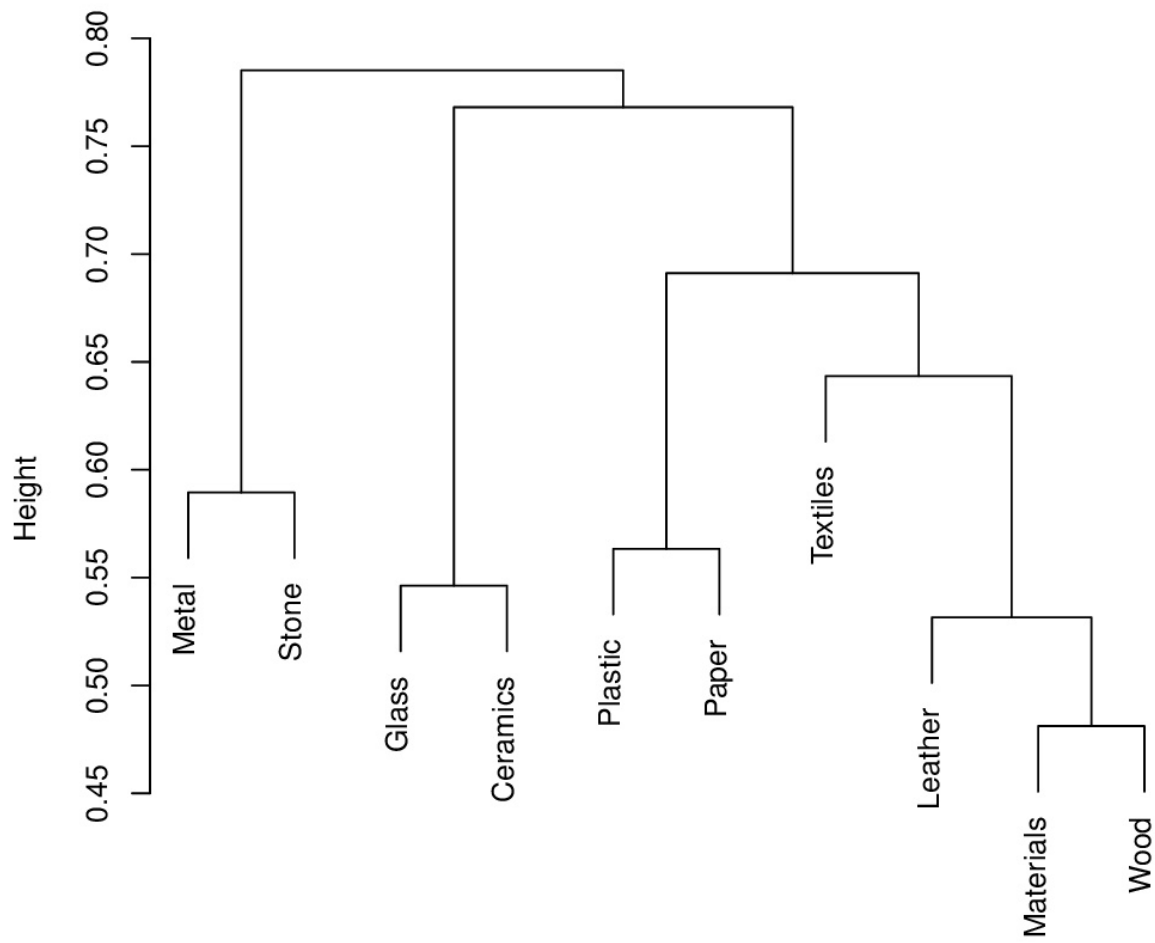
Comparison of Subsamples 1 and 2

In order to check the similarity of the results, we calculated the Ružička similarity for each subsample separately and also for both subsamples taken together. The results of the last analysis were fed to a classical MDS and HCA. Visualizations of the two analyses showed the similarity of the results (see Fig. S5 and Fig. S6). A Procrustes analysis (Jackson, 1995; Peres-Neto & Jackson, 2001) of the MDS solutions for each subsample yielded a significant correlation between the MDS results (sum of squares $m^2 = 0.072$, $r = .96$, $p < .001$, 10000 permutations; see Fig. S7). Similarly, the Mantel correlation (Mantel, 1967; Schneider & Borlund, 2007) of the Ružička matrices also confirmed the similarity of the subsamples (Mantel statistic $r: .86$, $p < .001$, based on 10000 permutations). Thus, the second subsample replicated the results of the first subsample, allowing joint analyses.

Welch's Test

Category	1	2	3	4	5	6	7	8	9
1 Materials									
2 Glass	2.21**								
3 Wood	0.29	1.92**							
4 Ceramics	2.24**	0.02	1.95**						
5 Plastic	2.41**	0.20	2.13**	0.18					
6 Leather	1.33**	0.88*	1.04*	0.91*	1.09**				
7 Metal	1.77**	0.44	1.49**	0.46	0.64*	0.45			
8 Paper	2.12**	0.10	1.83**	0.12	0.30	0.79*	0.34		
9 Stone	0.27	2.48**	0.56	2.50**	2.68**	1.60**	2.04**	2.38**	
10 Textiles	0.31	1.90**	0.02	1.92**	2.10**	1.02**	1.46**	1.80**	0.58

Note. Absolute mean difference between materials. * = The mean difference is significant at the .05 level; ** = The mean difference is significant at the .01 level.



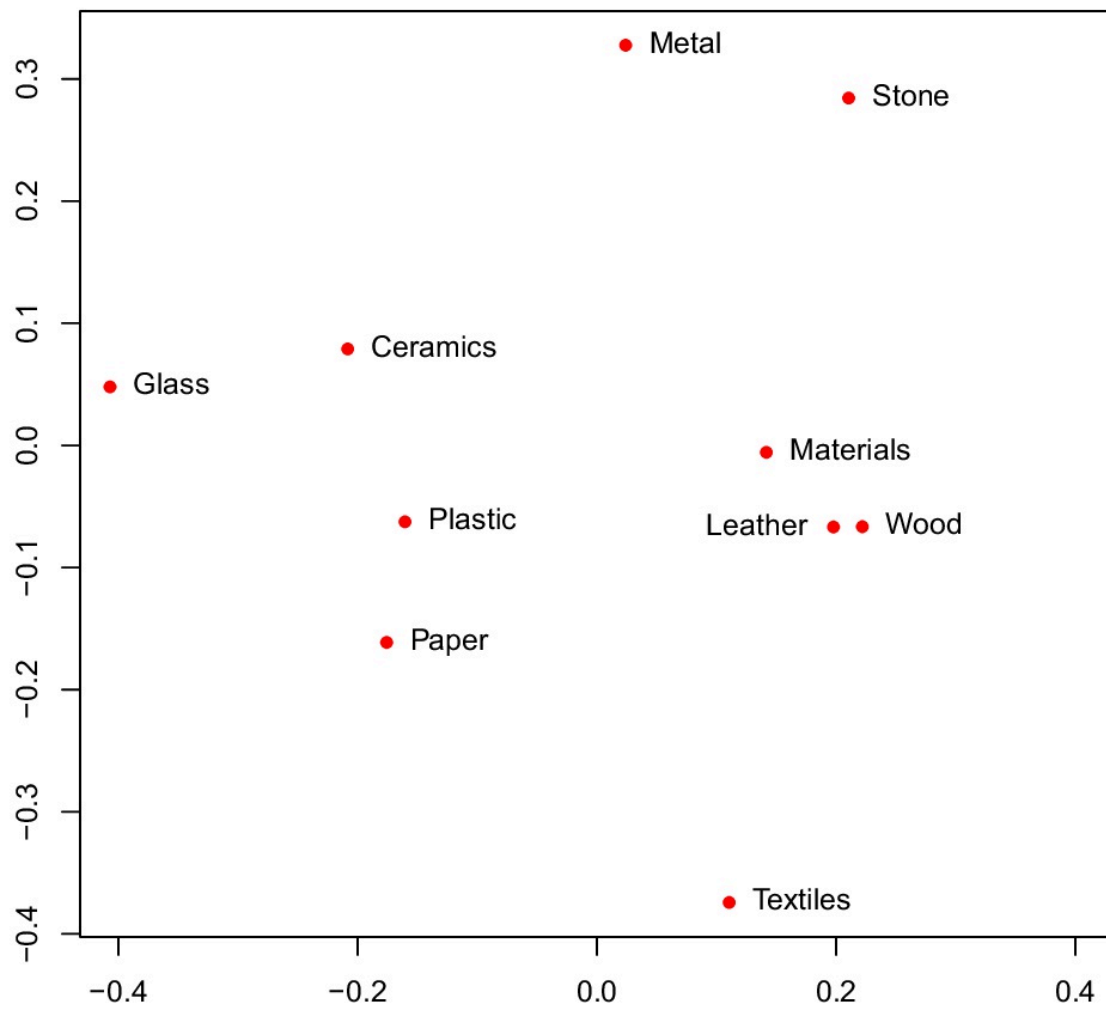


Figure S.2. Two-dimensional multidimensional scaling solution for the ten categories.

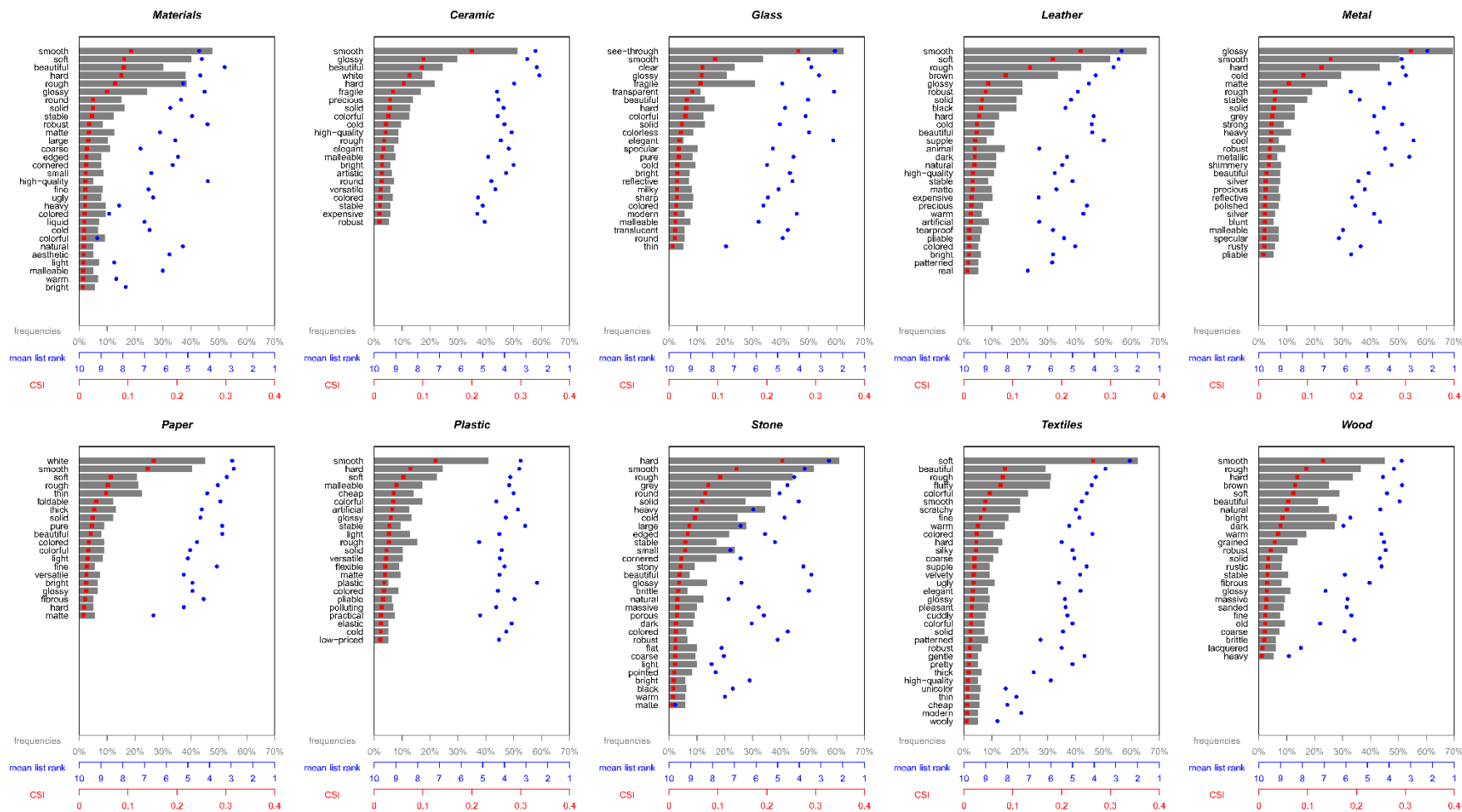
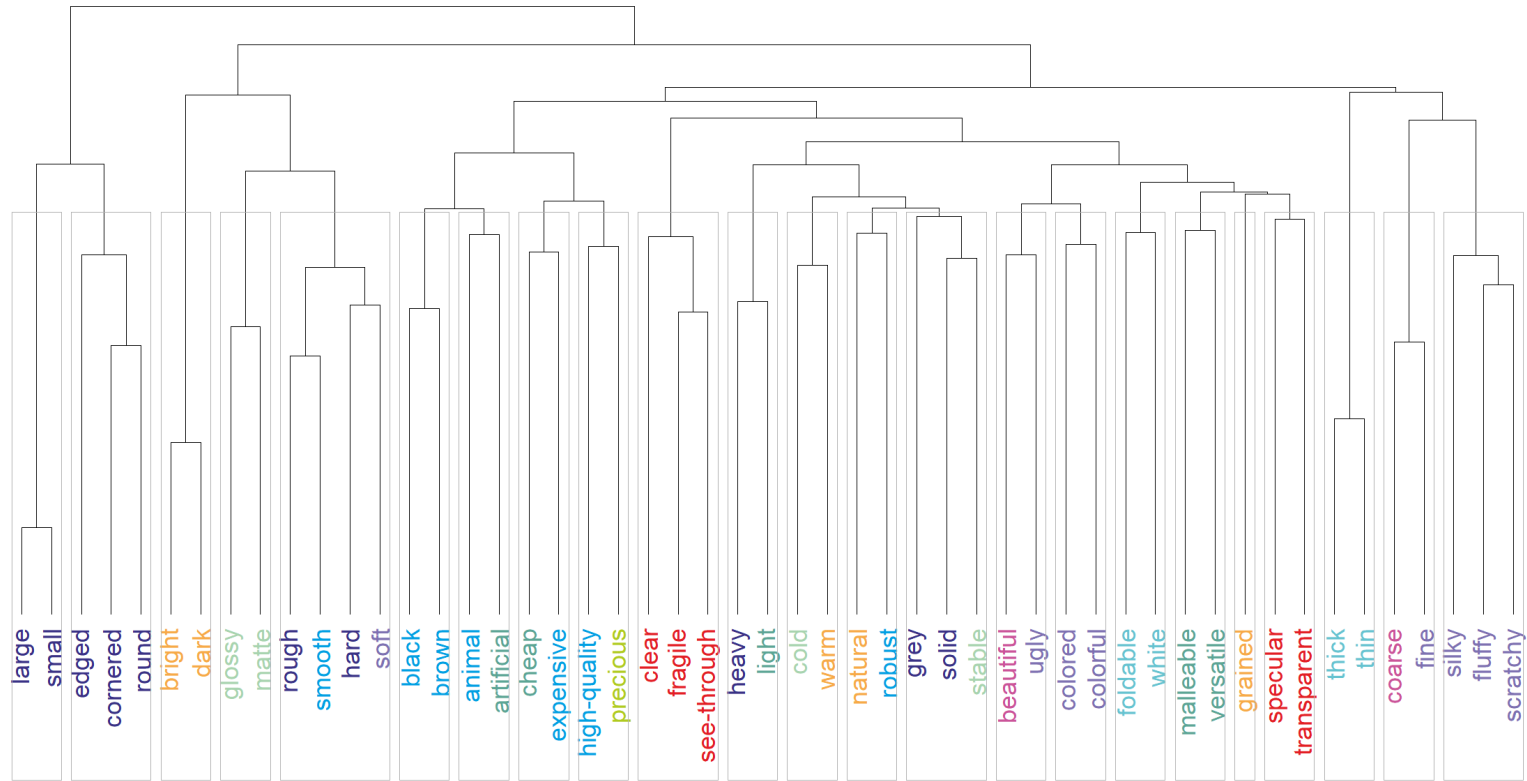


Figure S3. Results obtained for the terms within each category.



Color coding of categories									
Glass	Wood	Ceramic	Plastic	Leather	Metal	Paper	Stone	Textiles	Materials

Figure S4. Dendrogram of the hierarchical cluster analysis of the terms produced after applying a 10% cut-off.

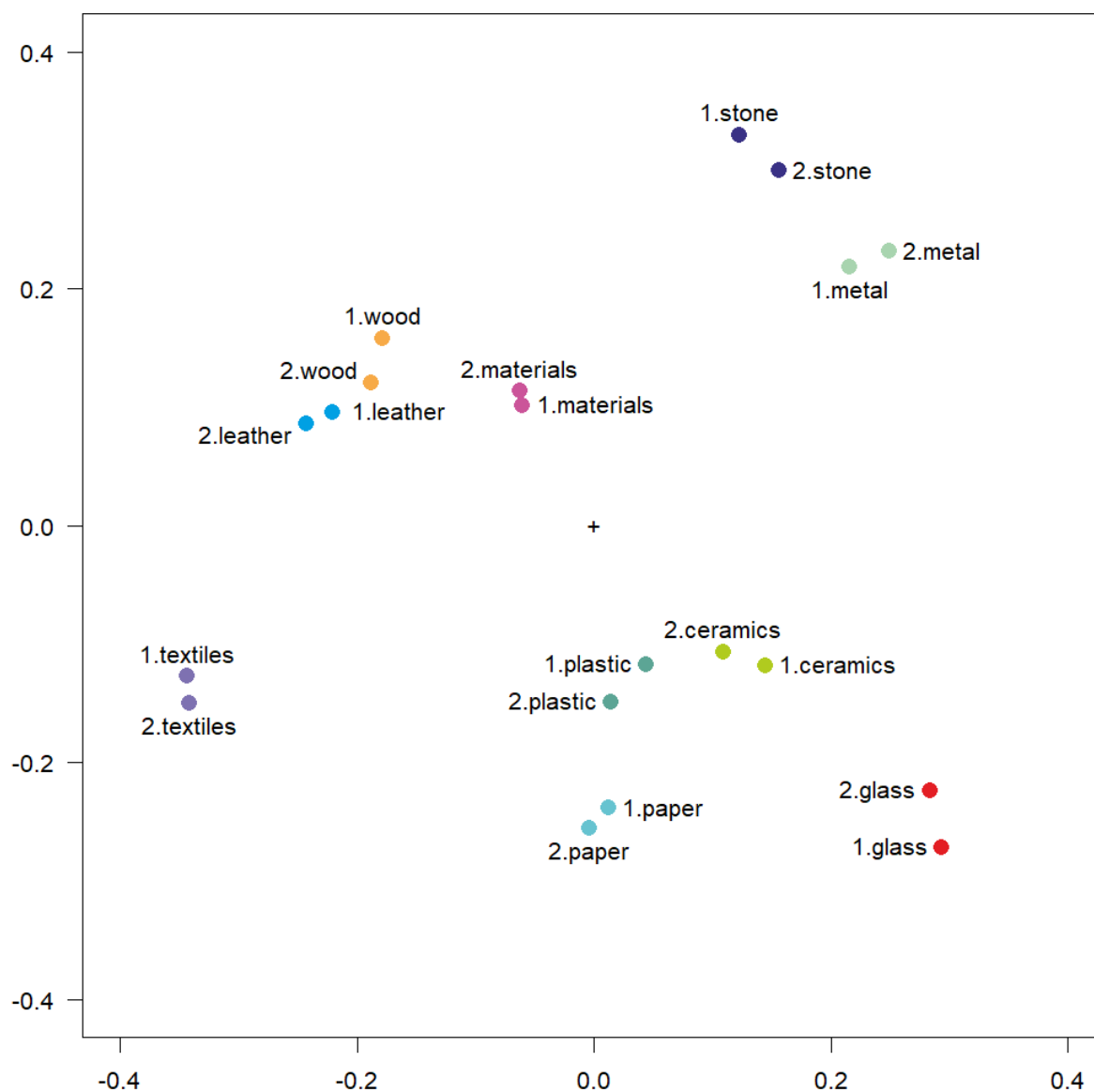


Figure S5. Two-dimensional multidimensional scaling solution for the comparison of Subsamples 1 and 2.

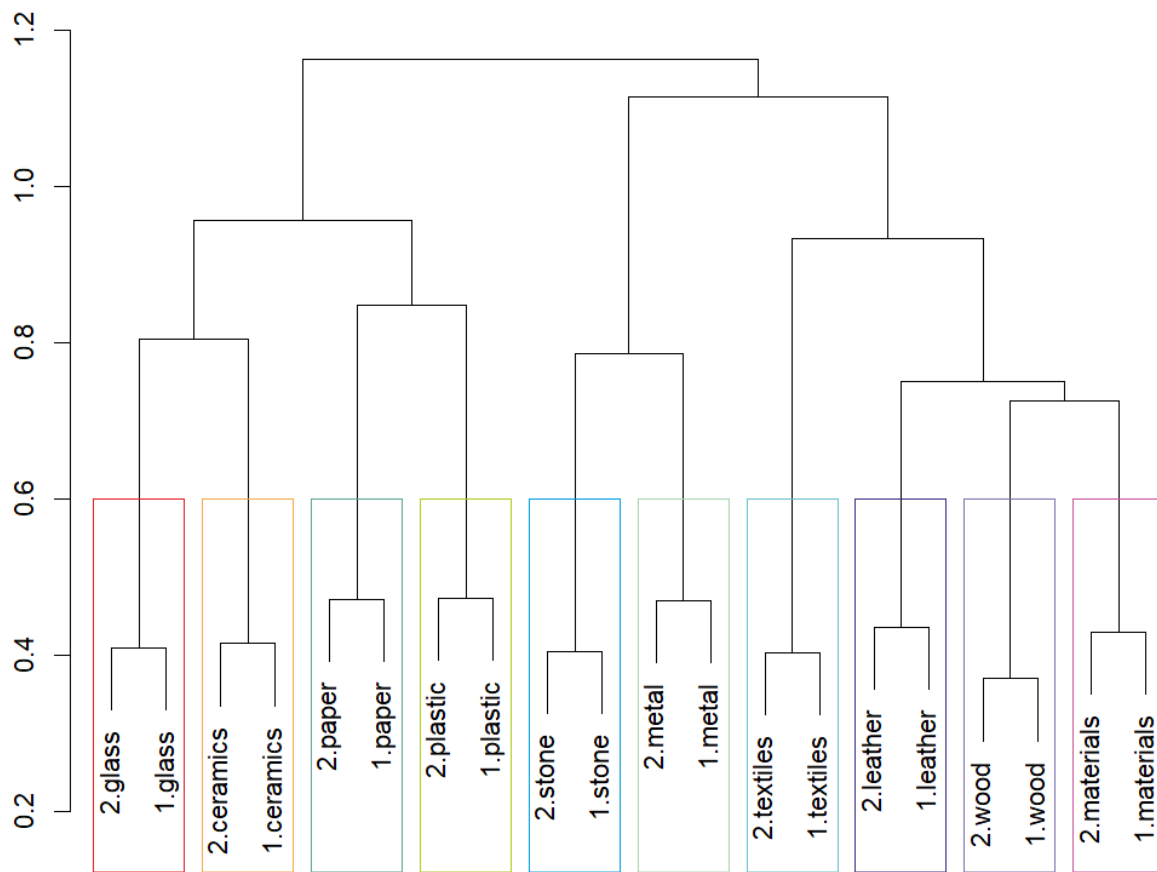


Figure S6. Dendrogram of the hierarchical cluster analysis of the comparison of Subsamples 1 and 2.

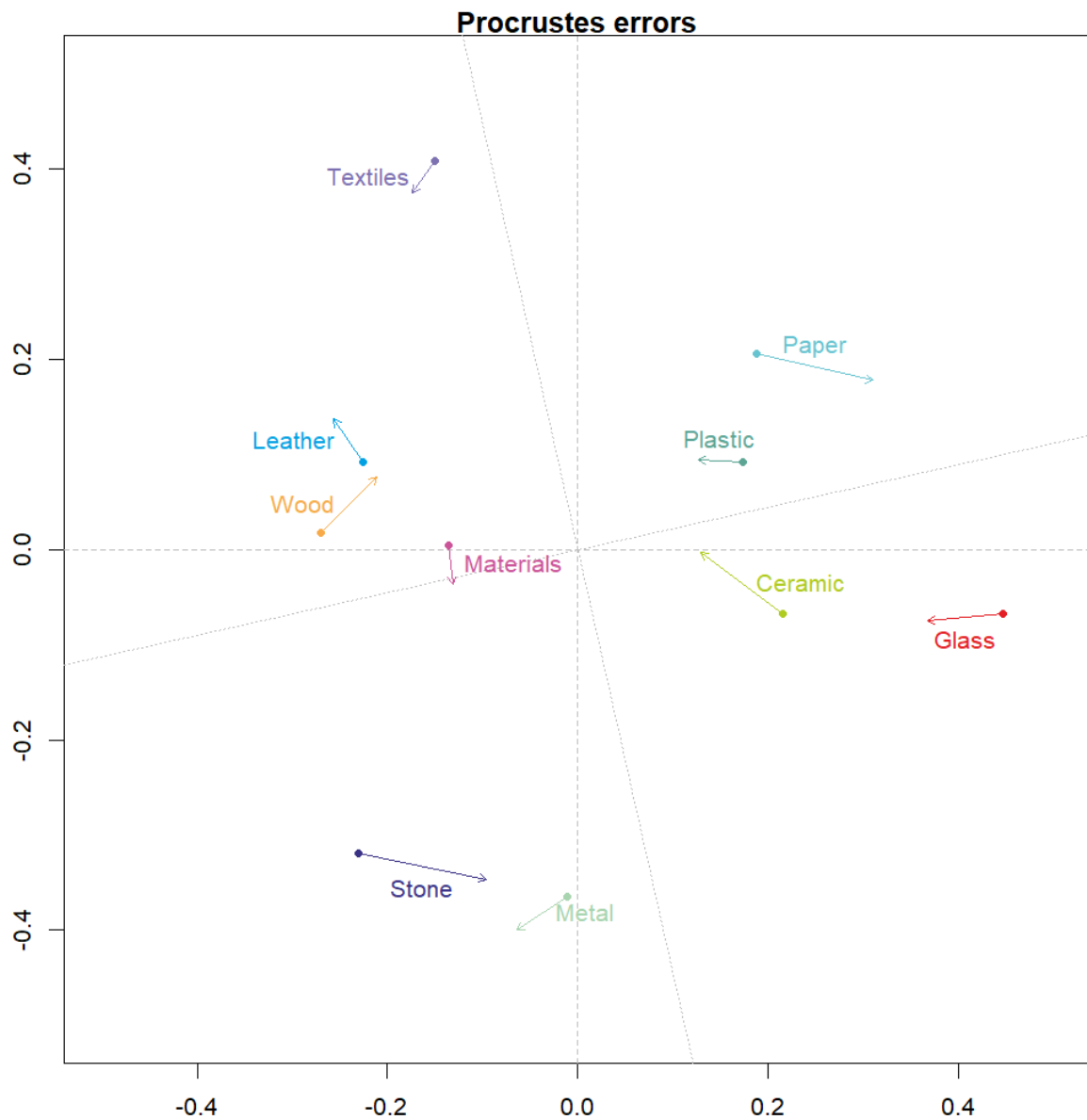


Figure S.7. Procrustes analysis of the multidimensional scaling solutions for Subsample 1 and 2. Errors are indicated by the colored arrows.