

**Appendix 4.** Comparing FCM indices between game and article groups before intervention

**Table A4.1**

	Control Map 1 (n=20)	Treatment Map 1 (n=21)	(Unpaired) t- test p-value	Mann Whitney test p-value
Number of concepts (N)	9.15 (2.70)	8.67 (2.78)	0.5759	0.4927
Number of connections (C)	13.7 (5.67)	11.33 (5.18)	0.1704	0.1254
Ratio of connections to nodes (C/N)	1.48 (0.39)	1.31 (0.41)	0.1687	0.1705
Density	0.08 (0.07)	0.11 (0.09)	0.2065	0.1144
Number of receiver concepts	1.95 (1.67)	1.90 (1.39)	0.8341	0.7531
Number of transmitter concepts	1.8 (1.06)	1.86 (1.31)	0.8792	0.9782
Number of unconnected nodes	0.15 (0.67)	0.42 (0.98)	0.2965	0.1908