Journal Research Data Policy Across Disciplines: Comparison Between 2014 and 2019

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Purpose

To examine journal research data policies across a wide range of disciplines and compare them with the 2014 study[1].
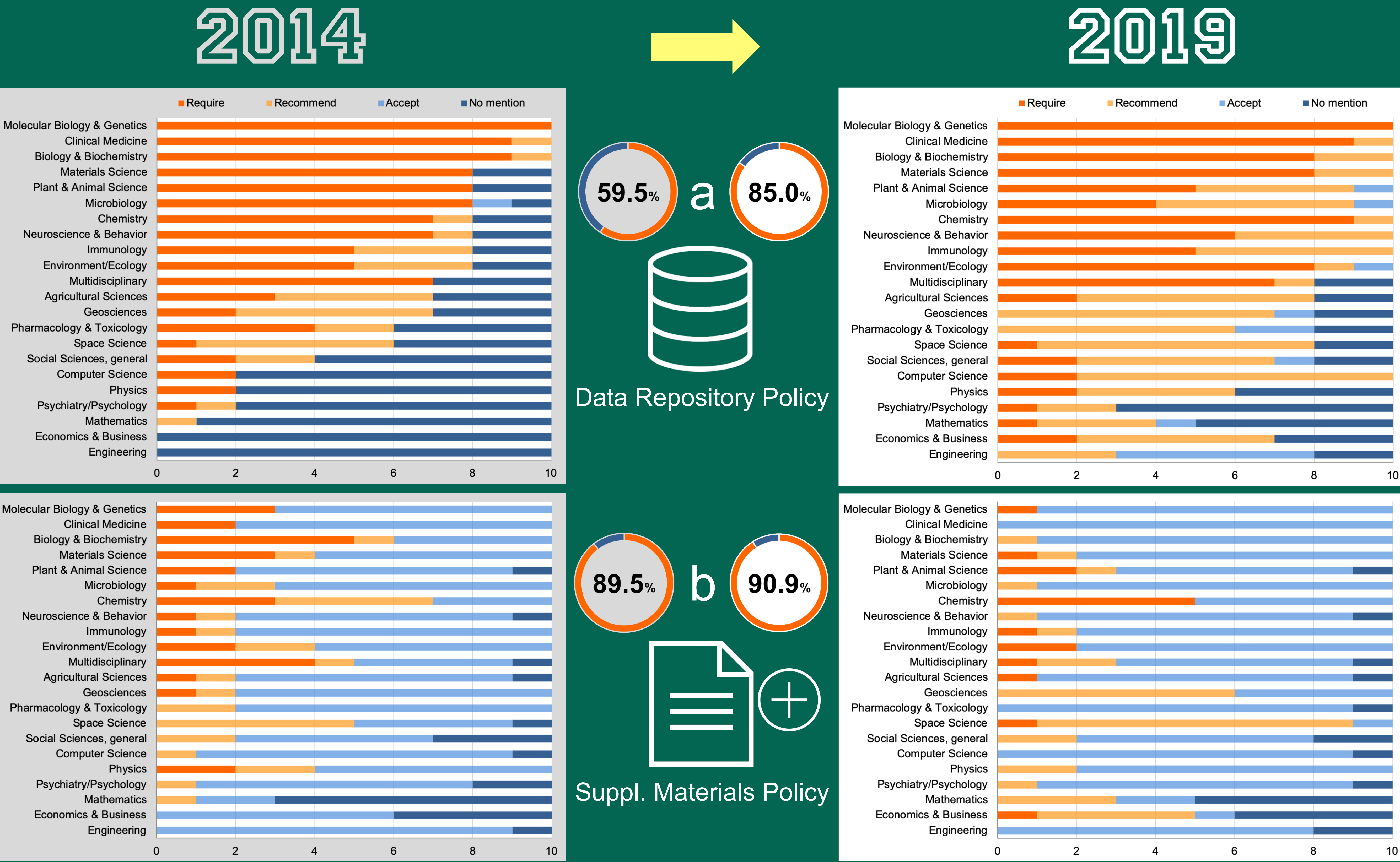- a. Data Repository Policy
- b. Supplemental Materials Policy
- c. Data Citation Policy

Methods

Reviewed 220 journals' data policies (= 22 disciplines × 10 high-IF journals in 2014) and classified them into 4 categories.

Require	require, must, should, condition of publication
Recommend	encourage, recommend
Accept	accept, allow, might, possible to include
No mention	(no mention)

2014 → 2019

Require · Recommend · Accept · No mention

a 59.5% → 85.0%

Data Repository Policy

b 89.5% → 90.9%

Suppl. Materials Policy

Disciplines (both charts):
Molecular Biology & Genetics, Clinical Medicine, Biology & Biochemistry, Materials Science, Plant & Animal Science, Microbiology, Chemistry, Neuroscience & Behavior, Immunology, Environment/Ecology, Multidisciplinary, Agricultural Sciences, Geosciences, Pharmacology & Toxicology, Space Science, Social Sciences, general, Computer Science, Physics, Psychiatry/Psychology, Mathematics, Economics & Business, Engineering

Conclusion

- a. The percentage of the journals with the data repository policy increased from **59.5**% (2014) to **85.0**% (2019).
- b. The percentage of the journals with the supplemental material policy also increased from **89.5**% (2014) to **90.9**% (2019).
- c. **55.0**% of the target journals have the data citation policy.

c 55.0%

Data Citation Policy

References

1. Ikeuchi U. Data sharing policies in scholarly journals across 22 disciplines [dataset, 2014]. figshare. https://doi.org/10.6084/m9.figshare.3144991
2. Data Citation Synthesis Group: Joint Declaration of Data Citation Principles. Martone M. (ed.) San Diego CA: FORCE11; 2014. https://doi.org/10.25490/a97f-egyk
3. TOP Guidelines. Center for Open Science (COS). https://cos.io/top/

	DCP	JDDCP[2]	TOP[3]
Molecular Biology & Genetics	10	2	
Microbiology	10	1	
Engineering	8	8	5
Environment/Ecology	8	7	6
Multidisciplinary	8	5	1
Plant & Animal Science	8	4	4
Computer Science	8	4	
Geosciences	8		
Biology & Biochemistry	7	6	
Agricultural Sciences	6	5	
Chemistry	6	1	
Materials Science	5	3	
Social Sciences, general	5	3	
Economics & Business	5	2	
Immunology	4	4	
Pharmacology & Toxicology	4		
Space Science	4		
Neuroscience & Behavior	2	1	
Physics	2		
Clinical Medicine	1	1	
Psychiatry/Psychology	1	1	
Mathematics	1		
TOTAL	**121**	**58**	**16**

The number of journals having a data citation policy, referring the JDDCP and/or the TOP guidelines.

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