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Citation analyses are based on two questionable assumptions that significantly influence the value of citation count: the equal contribution assumption and the positive endorsement assumption. To determine to what extent the two problematic assumptions affect the validity of citation analyses in humanities and social sciences (H&SS), this study employed a citation context analysis approach to examine the distributions of essential vs. perfunctory citations as well as confirmative vs. negational citations. The sample comprises 360 articles from six subject areas included Chinese literature, history, arts (i.e., the humanities subjects); sociology, economics, and psychology (i.e., the social sciences subjects). Totally, 25,617 in-text bibliographic citations were analyzed.

Under the citation-level analyses, the findings show that the distributions of citation functions for those six subject fields were all significantly different, the social sciences fields employed more essential citations than the humanities (70.2 vs. 62.2%). Among the humanities fields, Chinese literature had the highest percentage of essential citations (78.5%), while history had the lowest (52.9%). For the social sciences, both sociology and psychology used roughly 75% essential citations; economics had a much lower percentage than the other two (56.1%). The distribution of confirmative and negational citations also show the difference. Of the 25,617 H&SS citations, the majority were confirmative citations; only 725 citations (2.83%) were negational. The humanities combined employed a slightly higher percentage of negational citations than the social sciences (4.17 vs. 1.70%). History stood out among those H&SS fields for its noticeably higher percentage of negational citations, accounting for 9.1% of its total citations.

Article-level analyses focused on whether a particular citation function was present in an article. In perfunctory-confirmative citations, Chinese literature was noticeably lower than the other subjects. As to the use of negational citations, history, sociology, and arts had larger numbers of articles containing at least one negational citation. Chinese literature and economics studies continued to be the lowest in negational uses in H&SS. History was also high in perfunctory-negational citations, while the other

five subjects were rather low. These findings show the very different argumentation styles in those subject discipline

Table 9 Distribution of citation functions at the article level (n = 60 for each subject field)

		Confirmative (n; %)			Negational (n; %)		
Essential	Chinese literature	History	Arts	Chinese literature	History	Arts	
	(59; 98.3%)	(59; 98.3%)	(60; 100%)	(15; 25.0%)	(33; 55.0%)	(22; 36.7%)	
Perfunctory	Sociology	Economics	Psychology	Sociology	Economics	Psychology	
	(60; 100%)	(60; 100%)	(60; 100%)	(30; 50.0%)	(13; 21.7%)	(17; 28.3%)	
Essential	Chinese literature	History	Arts	Chinese literature	History	Arts	
	(51; 85.0%)	(59; 98.3%)	(59; 98.3%)	(3; 5.0%)	(34; 56.7%)	(9; 15.0%)	
Perfunctory	Sociology	Economics	Psychology	Sociology	Economics	Psychology	
	(60; 100%)	(60; 100%)	(58; 96.7%)	(9; 15.0%)	(4; 6.7%)	(3; 5.0%)	