

1 Academic Integrity in China

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5 Abstract

6 The chapter will explore academic integrity in relation to the research (mis)conduct of academic faculty in
7 universities in China (excluding Hong Kong, Macau, and Taiwan). The academic profession in China is
8 state sponsored rather than autonomous and has one of the lowest basic salary levels internationally. The
9 rapid growth of higher education in China, allied with performative pressures in the ranking race, has led
10 to increasing concerns about research integrity focused mainly on the conventional misconduct categories
11 of falsification, fabrication, and plagiarism. However, research integrity in China also needs to be
12 understood by reference to cultural norms, including the building of relationships and courtesy toward
13 and respect for authority. Norms based on a Western conceptualization of research integrity do little to
14 challenge or alter practices associated with *guanxi* and the intensive norms of reciprocity which dominate
15 academic life in China. Weak professional self-regulation and poor academic socialization have also
16 contributed to the current problematic situation of academic integrity in China.

17 Introduction

18 The term “academic integrity” is open to a wide range of interpretations including “the values, behaviour
19 and conduct of academics in all aspects of their practice” (Macfarlane, Zhang, & Pun, 2014, p. 339).
20 Given the limitations of space, this short essay will mainly focus on issues in relation to the research
21 conduct of academic faculty in the People’s Republic of China (hereafter referred to as “China”). It will
22 exclude consideration of the higher education systems in Hong Kong and Macau which, as special
23 administrative regions of China under the “one country, two systems” policy, are governed by a
24 substantially different set of economic, social, and cultural conditions. The chapter further excludes
25 consideration of Taiwan, otherwise known as The Republic of China, which has never been part of the
26 People’s Republic of China.

27 Academic integrity in China needs to be understood by reference to the rapid expansion of the higher
28 education system over the last 15 years. According to government figures published in 2013, there are
29 1145 universities and 1,013,957 faculty members in China (Ministry of Education of China, 2014). The
30 Q1 desire for China to compete on the global stage as a major knowledge producer (Xie, Zhang, & Lai, 2014),
31 as well as its emerging position as an economic superpower, is evidenced by the fact that its research and
32 Q2 development spending have tripled since 1995 (Sun & Cao, 2014) and its research output has increased
33 sixfold since 2000 (Hvistendahl, 2013). It is against this backdrop that serious concerns about standards
34 of academic integrity in China have arisen. Such concerns have been highlighted in an international
35 science context by journals such as *Nature* (Cyranoski, 2012), *Science* (Yang, 2013), and *The Lancet*
36 (Editor, 2010).

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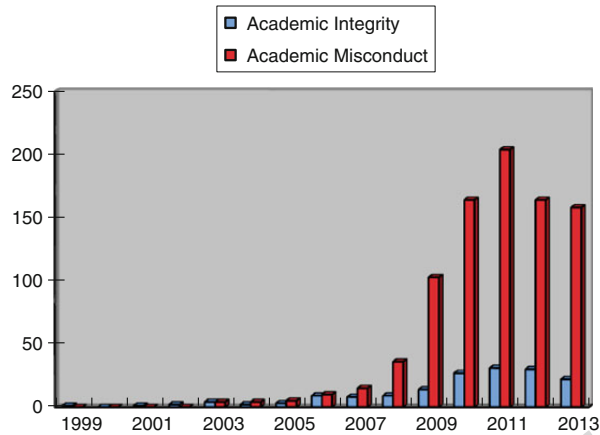


Fig. 1 Number of Chinese journal articles on the theme of academic integrity and academic misconduct from 1999 to 2013 (Source: From the Chinese database of full-text core journal articles (1999–2013))

37 Framings of Academic Integrity in Chinese

38 In Chinese, there are two binary words corresponding to academic integrity as both negative and positive
 39 framings (Macfarlane et al., 2014). “Xueshuchengxin” is the positive framing to indicate desirable
 40 academic values of honesty, credibility, and reliability. The negative framing in Chinese is
 41 “Xueshubuduan.” From the literal meaning, “buduan” means not upright. Academic misconduct and
 42 academic corruption are also used interchangeably as a negative way of framing academic integrity.

43 The number of published research articles on the theme of academic integrity (both positively and
 44 negatively framed) in the Chinese Database of Full-text Core Journal Articles was just 1 in 2000. By 2013,
 45 this figure had risen to 1074 (see Fig. 1). It is notable that articles focused on the negative framing of
 46 academic integrity as academic misconduct predominate.

47 The growth in output closely mirrors substantial increases in government funding for projects
 48 addressing academic integrity and misconduct issues during this period (Chen & Lin, 2012; Sun &
 49 Cao, 2014). Correspondingly, the Ministry of Education in China has issued six separate policies on
 50 academic misconduct since 2009. Data released by the Department of Audit within the National Natural
 51 Science Foundation in 2013 cites 204 cases where 318 persons have been disciplined for academic
 52 misconduct between 1999 and 2010 (National Natural Science Foundation Council, 2013). The most
 53 commonly reported offenses have been falsification, fabrication, plagiarism, and double-dipping of
 54 publications (Chen, Fang, Chen, Ouyang, & Huang, 2014).

55 Perhaps even more worryingly, Chinese academics themselves regard academic misconduct as a
 56 common phenomenon. For example, based on a large-scale survey with 30,000 scientists and academics,
 57 half of the respondents confirmed that among the researchers they knew, there existed at least one of the
 58 four types of academic misconduct: plagiarism, falsification of data, double-dipping of publications, and
 59 ghost authorship (Zhao & Deng, 2012). The integrity problems are thought by Chinese academics not
 60 only to be widespread but also entrenched. In a 2010 survey, over three quarters of academics from top
 61 universities in Beijing agreed that academic misconduct could not be eliminated despite a series of
 62 government policy initiatives (Yan & Zhang, 2010).

63 The Cultural and Institutional Context

64 As these reports indicate, academic integrity is a complicated phenomenon to address in China and
65 demands a close understanding of the context. The cultural and institutional context has constituted rules
66 and social regularities to shape the social actions of individual academics beyond their own power. This
67 does not deny individual agency to uphold academic integrity, but provides an approach to examine
68 entrenched social rules and deep structures. The embedded cultural and institutional context in China has
69 far-reaching impact beyond academic culture itself (Ren, 2012; Yang, 2013).

70 Academic salaries are among the lowest in the world, well below those of developing nations such as
71 Ethiopia and Kazakhstan. In a comparative study involving 28 countries, only academics in Armenia and
72 Russia had lower salaries than their Chinese counterparts, while China paid the lowest entry-level salary
73 of all (Altbach, Reisberg, Yudkevich, Androushchak, & Pacheco, 2012). The study also reported that
74 China has the largest salary variation in the world. Another empirical study of professors' income level in
75 Beijing, the capital city with a cost of living comparable to New York, found the average income of
76 university professors in 2010 was lower than the average income level in the city (Zhang & Zhao, 2014).
77 This means that Chinese academics must look to find ways to significantly supplement their very low
78 basic income by a range of activities, including teaching at other institutions, contract research, as well as
79 research funding and publication.

80 The Chinese cultural practice of "guanxi" means the building of relationships with a view to future
81 reciprocal benefits differing from Western norms connected with self-interested individualism (Hwang,
82 1987). Guanxi as a culturally ingrained practice underpins a range of authorship issues. For example, by
83 contrast with Western counterparts, payment for publication by Chinese academic journals is a wide-
84 spread practice, which encourages quantity rather than quality of output. Adding the name of a well-
85 known professor to the list of authors is a tacit means of increasing the chances of a paper getting
86 published. Authorship order is usually based on a taken-for-granted hierarchical structure. Normally, "the
87 boss," either the doctoral supervisor or the principal research grant holder, will get the most credit
88 regardless of his or her real contribution to the paper. Doctoral students, sitting at the base of the hierarchy,
89 will be expected to gift first authorship credit to supervisors on academic papers. However, doctoral
90 students toward the end of their registration period in China, as in other Asian contexts such as Japan, are
91 normally expected to publish as a first author as a precondition to the award of a doctorate. They will,
92 therefore, be permitted a first authorship credit in order to graduate, assuming that they have complied
93 with expectations to gift credit for some of their earlier academic work to others within the hierarchy. This
94 leads to patterns of reciprocal obligation underpinned by cultural norms connected with indebtedness,
95 respect for authority, and relationship building (Macfarlane & Saitoh, 2009; Salita, 2010; Zeng & Resnik,
96 2010).

97 Chinese universities commonly employ an incentive pay system to reward publications in high-impact
98 journals. The more prestigious the journal, the higher the reward, particularly if the journal has a high
99 impact factor in an international index, such as the Science Citation Index (SCI). This can be the
100 equivalent of anything up to 6 months' salary for a single paper, thereby acting as an important material
101 incentive for lowly paid Chinese academics. While a publication incentive system has started to emerge in
102 other contexts, notably in South Africa (Tongai, 2013), the scale and significance of its distorting effects
103 cannot be compared with China, given the extent to which Chinese academics depend on it as a means of
104 supplementary salary generation.

105 The academic promotion system in China overemphasizes the number of papers as opposed to their
106 quality. This can result in double-dipping, where papers are published more than once in different Chinese
107 journals as well as in Chinese and English. Being the first (or corresponding) author on a paper is critical to
108 gain promotion. This encourages a misrepresentative manipulation of authorship credit on the basis of

109 circumstances and personal needs. Plagiarism in the writing of papers and the falsification of data also
110 appear to be examples of where corrupt practice is “embedded in academe” according to extensive reports
111 in the news media (Altbach, 2009, p. 23).

112 Bribery in the university admissions system and in the awarding of grades is another area in which
113 corruption in some less prominent Chinese universities is acknowledged (Altbach, 2009). However, more
114 indirect means of gaining advantages also play a role in the Chinese context given the cultural importance
115 of *guanxi*. Treating sexual favors as a tradeable commodity in return for granting requests is a part of
116 *guanxi* (Yang, 1994). Such practices have long been associated with admission to a university following
117 the end of the Cultural Revolution in 1977 and beyond (Rene, 2013). Beyond the actual provision of
118 sexual services, the use of sexuality or “charm” plays a more subtle role as part of the art of *guanxi* (Yang,
119 1994).

120 These cultural and contextual factors and performative pressures – norms of reciprocity associated with
121 *guanxi*, low salary levels, payment by publication, bribery, and the importance of first authorship in
122 academic promotion and doctoral graduation – have proven a recipe for academic corruption in China.
123 Research misconduct is usually identified and judged by academic communities through professional
124 self-regulation (Gorman, 2014). The Chinese academy though is a state-sponsored profession (Lo, 1991).
125 It is controlled and patronized through its dependence on the state as the major research patron. The state
126 has also become the moral judge of academic (mis)conduct, leaving little room for the development of
127 professional autonomy and reflectivity. Academic salaries are largely performance and incentive based,
128 which makes transgressions of academic integrity more likely. The values central to academic life,
129 including sincerity in the reporting of data, humility in making knowledge claims, and respectfulness
130 for the precedence of others, are undermined as a result.

131 Summary

132 Academic misconduct is widespread and entrenched within the Chinese higher education system. The
133 state in China has played a paradoxical role in both shaping the conditions which have led to research
134 misconduct and, more recently, regulating academic ethics. They have created the conditions within the
135 higher education system which have caused academic misconduct to flourish while at the same time
136 seeking to publicly scapegoat individuals who are frequently victims of a system which has normalized
137 certain unethical practices in academe.

138 Despite attempts by government to tackle academic corruption (Ren, 2012) and recent system-wide
139 reforms of research funding management, this situation is unlikely to improve in the absence of
140 professional self-regulation. Efforts, however, are taking place at the institutional level. Peking University
141 established its own academic misconduct policies in 2001 based on the American FFP (falsification,
142 fabrication, and plagiarism) formula. Subsequently, a number of other institutions have followed suit
143 (Zeng & Resnik, 2010). However, these policies are based on a Western conceptualization of research
144 integrity and do little to challenge or alter practices associated with *guanxi* and the intensive norms of
145 reciprocity which dominate academic life in China.

146 Socialization is the key mechanism by which academics learn about professional values and conduct.
147 Current ingrained practices connected with gift and ghost authorship, for example, corrupt doctoral students
148 and junior academics, leading to a cycle of abuse from one generation to another. One survey indicates that
149 around 40 % of early-stage doctoral graduates do not see academic misconduct as a problem (Zhao, 2008).
150 Hence, the cycle of abuse will not end until the assumptions which underpin academic integrity malprac-
151 tices are openly discussed and challenged. Meanwhile, the malpractices embedded in the higher education
152 system will continue to undermine international trust in China’s growing scientific output.

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Uncorrected Proof

Index Terms:

Academic integrity (AI) 1
 in China 1
Bribery 4
 university admissions system 4
Plagiarism 4

Uncorrected Proof