

AN ANALYSIS OF EXCHANGES IN CHINESE SOCIAL MEDIA. ARE SOCIAL NETWORKING SITES CONTRIBUTING TO CHEATING?

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ABSTRACT

This study investigates the possibility that social networking sites in China are used to exchange information about the use of unfair means in university assignments. It presents a thematic analysis of 303 messages posted between September 2016 and September 2017, on a group set up on Douban for Sheffield University students. It also draws on information provided by members of WeChat group who had formerly been students at Sheffield University.

The study was prompted by an apparent increase in the practice of faking references. None of the posts on Douban referred to this practice. Students on the WeChat group suggested it was commonplace. Both Douban and WeChat were used to provide information about essay-writing services.

KEYWORDS

Social Media, SNS, Unfair Means, Cheating

1. INTRODUCTION

The value of the Internet in promoting a “culture of connectivity” was quickly realised following the development of the World Wide Web in 1990 (Hoffman, Novak, and Chatterjee, 1995). This culture of connectivity has had a profound impact on e-Learning, and the rise of social media has created many opportunities.

By 2009, over 90% of respondents to a US student survey were using Social Networking Sites (SNSs) (Smith, Salaway & Caruso, 2009 p14). The availability of such sites has facilitated spontaneous exchanges of information, helping to create new ways of teaching and learning, and empowering students to take charge of their own learning (Dabbagh, Kitsantas, 2012). However, such empowerment creates opportunities for misuse.

In May 2018, a BBC investigation found that over 250 YouTube channels were advertising essay writing services for students wishing to purchase coursework (Jeffreys & Main, 2018). Given the existence of such a high profile promotion of cheating, it is likely that other, more discreet exchanges are occurring, in which students use SNS to exchange information relating to unfair means.

Several years before the BBC investigation, Seitz, Orsini & Gringle (2011) analysed 43 YouTube videos which gave advice on how to cheat in exams and coursework. Some of the videos were very popular in English-speaking countries (one had over 6 million views), and one of Seitz, Orsini & Gringle’s recommendations was that the sites should be monitored by educationalists in order to counter dishonest behaviour. However, as the authors observed, “*While YouTube does not represent an exhaustive inventory of cheating techniques, it appears to be one forum for strategy sharing.*” This statement prompts the question: where else are strategies being shared? Furthermore, in listing the limitations of their research, the authors pointed out that their study was restricted to YouTube videos in English. Use of social media to share cheating strategies need not be limited to the English language.

The recommendation to monitor sites is sensible, but for educationalists in English-speaking countries, Chinese students represent a particular challenge. Not only is there a significant language barrier, there are also problems due to the fact that the social media most popular amongst Chinese students are distinct from those used elsewhere in the world. Yet the largest cohort of foreign students in the English speaking world

comes from China: Chinese students account for over 30% of the overseas student population in Australia (Department of Education and Training, 2017), the UK (Office for National Statistics, 2017) and the USA (U.S. Immigration and Customs Enforcement, 2017).

In recent years, a range of softwares has become available to help combat plagiarism (Weber-Wulff, Möller, Touras and Zincke, 2013), but other forms of cheating are harder to identify by automated means. The commissioning of essays from services such as those referred to by Jeffreys & Main (2018) is one that is particularly hard to identify, but another form of unfair means which is hard to detect by automated means is the falsification of reference lists. The question that prompted the research reported here arose because of several instances of the latter.

In 2015, two of the authors of this paper were working at the Information School at the University of Sheffield when one of the iSchool's senior lecturers noticed oddities in the lists of references attached to many essays. Some were clearly irrelevant (eg, Table 1), while others referred to articles which could not be found.

Once the problem had been identified, other markers began to notice it, and it became a common problem in the subsequent two years. Table 1 for example, shows some of the more surprising entries in a list of 40+ references that were presented in support of a 3000 word essay about information systems in the food industry.

It is probable that the behaviour had been occurring previously but was not spotted. Certainly, studies show that falsifying bibliographies is widespread (McCabe, 2017; Patel, Bakhtiyarii and Taghav, 2011). However, all the cases identified in this two year period were from Chinese students. This suggested the possibility that some Chinese graduates of Sheffield University exchanged information with prospective undergraduates. If false bibliographies had been presented for a number of years without sanction, experienced students may have posted information to this effect.

This article seeks to implement one of the recommendations of Seitz, Orsini & Gringle (2011) and to look at SNSs beyond YouTube and the English language. It focuses, in particular, on two Chinese language social media sites. The study concentrates on the period from September 2016 to September 2017, when the problem of false bibliographies amongst Chinese students was particularly acute, with a view to determining whether this was the focus of any exchanges.

Table 1. References presented in support of an essay on outsourcing of information systems

<p>Kerski, J. J. (2003). The implementation and effectiveness of geographic information systems technology and methods in secondary education. <i>Journal of Geography</i>, 102(3), 128-137.</p> <p>Sherman, G. G., Lilian, R. R., Barron, P., Candy, S., & Bhardwaj, S. (2014). Laboratory information system data demonstrate successful implementation of the prevention of mother-to-child transmission programme in South Africa: prevention of mother-to-child transmission-Progress towards the Millennium Development Goals. <i>South African Medical Journal</i>, 104(3), 235-238.</p> <p>Tena-Chollet, F., Tixier, J., Dusserre, G., & Mangin, J. F. (2013). Development of a spatial risk assessment tool for the transportation of hydrocarbons: Methodology and implementation in a geographical information system. <i>Environmental Modelling & Software</i>, 46, 61-74.</p> <p>Wang, W., Wu, J., Fang, L., Zeng, K., & Chang, X. (2015). Design and implementation of spatial database and geo-processing models for a road geo-hazard information management and risk assessment system. <i>Environmental Earth Sciences</i>, 73(3), 1103-1117.</p>
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2. METHODOLOGY

A mixed methods approach was used in this study, with information coming from two sources: from the social networking site Douban (豆瓣), and from a group of Chinese graduates of Sheffield University on the popular Chinese social media site, WeChat (n.d.).

Douban is an influential Chinese social networking service (Wikipedia, 2018) and is commonly used for informal exchanges of information within China. Three groups had been established for the University of Sheffield. Two were small (at the time of writing, one has one member, the other has 694 members). We analysed one year of data from the largest of the three groups.

The Douban group 谢菲尔德大学 Sheffield (literally, Sheffield University, Sheffield) (Douban, n.d.), has 6934 members and 2394 threads. Its first thread was begun on 27 January 2010. A thematic analysis was carried out on the 303 posts submitted between 12 September 2016 and 11 September 2017. The posts were classified according to a series of codes, which made it possible to identify the nature of student concerns, and of services provided.

The WeChat group was set up for Sheffield University graduates with connections to Guangdong province. Two members of the group offered useful insights which helped to provide a context for some of the findings. A third had worked for an essay-writing company, so provided some interesting information about the kind of service he had been paid to provide.

3. RESULTS

3.1 Analysis of Douban Postings

Posts were initially classified according to whether they were requesting or offering advice (Table 2), or whether they were from people providing a service or wanting to engage in some way with other students (eg, seeking assistance, companionship, etc) (Table 3).

Table 2. Role of Douban posting

	no.	%
Offering information	215	70.96
Seeking information	86	28.38
Unclear	2	0.66

Table 3. Motive for Douban posting

	no.	%
To engage with other students	153	50.50
Offering a service	141	46.53
Unclear	9	2.97

Most of the posts were from people offering information, with over 40% offering a service. The figure of 46.5% however, is only indicative of the number of posts, not of the value of their content. There was a tendency for people offering services to repeat or rephrase posts many times.

The nature of assistance offered and sought is much as would be expected from prospective students. Categories of post are shown in Table 4.

Table 4. Subjects of Douban posts

Subjects	no.	%
Accommodation	146	48.2
Assistance with Application	49	16.5
Seeking a companion (eg, for accommodation, course, travel, etc.)	36	11.9
Establishing a Social Media Group (For first year students, alumni, job seekers, etc.)	36	11.9
Others (eg, job seeking, experience sharing, second-hand goods selling, pick-up service, empty messages.)	30	9.9
Coursework	6	1.6

None of posts relating to companionship were offering services. All others were a mixture of offers of service and attempts to engage with other students (Figure 1). The small number of postings relating to coursework are translated and are shown in Appendix 1.

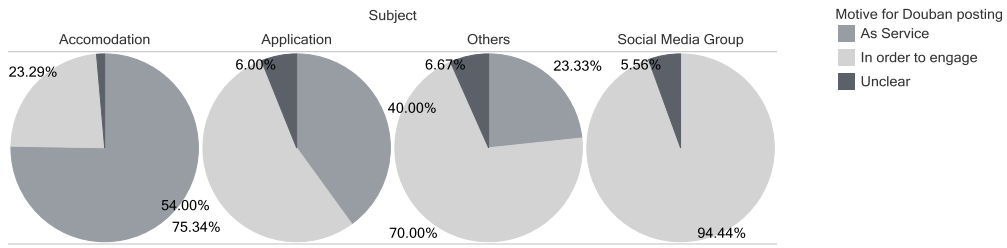


Figure 1. Reasons for posting on Douban. (Numbers for each chart are shown in Table 1)

The frequency of postings fluctuated throughout the academic year, following a predictable pattern (Figure 2, Figure 3). For example, most of the postings regarding companionship were from people seeking travelling companions. Not surprisingly therefore, these peaked in May, when students were planning their summer holidays.

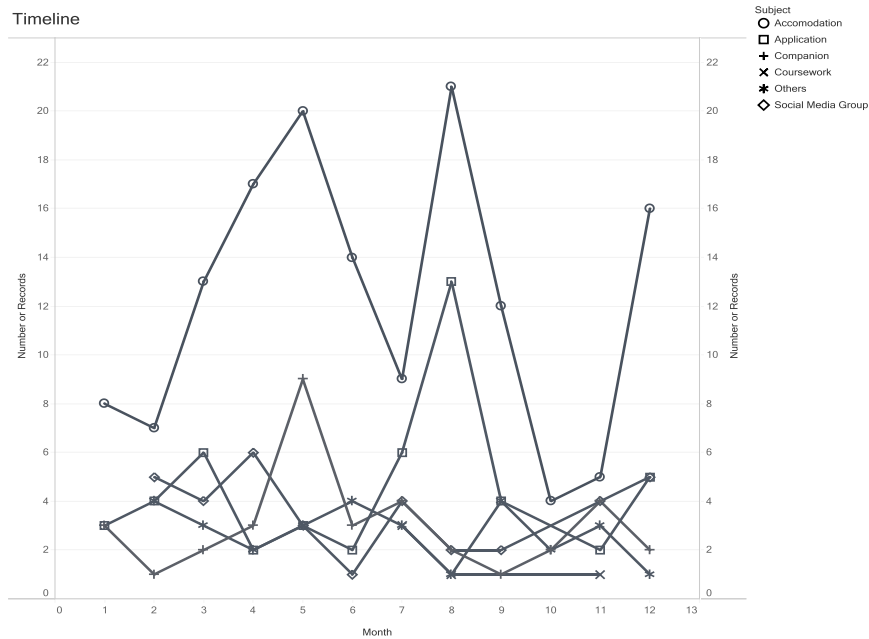


Figure 2. Line chart showing how frequency of postings on a particular subjects varies through-out the year

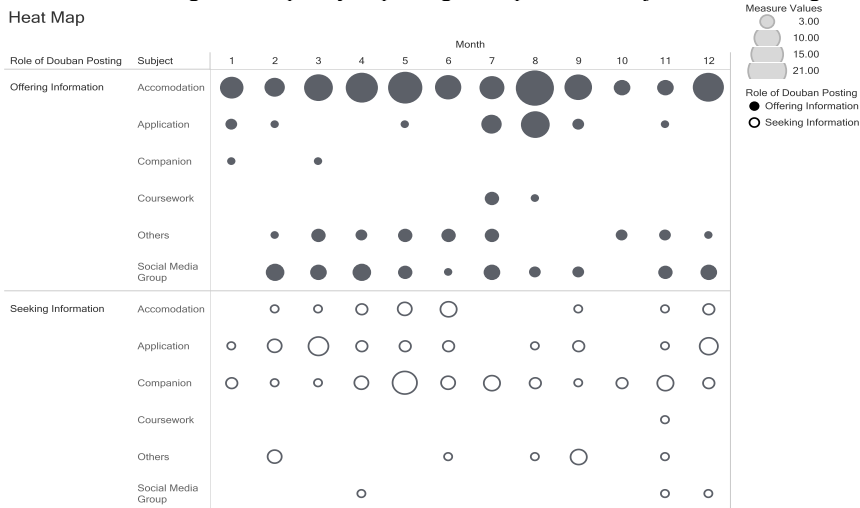


Figure 3. Heat Map, showing when postings on a specific subject are most frequent. Month 1 is January. The diameter of a circle is related to the number of postings

Contrary to the expectations of the authors of this paper, very few of the postings on Douban were on the subject of assignments. Five of the six that were, are clearly offering services, and the first takes an explicit moral stance.

3.1 Feedback from Chinese Graduates of the University of Sheffield

Information from the WeChat group of Chinese graduates of the University of Sheffield suggested that there was no need to offer advice on SNS about inflating reference lists, since the practice was common amongst undergraduates. Neither of the people who passed on this information was aware of anyone ever having been reprimanded. Both were confident that references were not checked during marking.

A third informant had, while studying in the UK, been approached to write essays by a WeChat contact who worked with a small team of Chinese essay writers at top universities in the UK, USA and China. The contact offered essays at a rate of ¥1 per word. To some extent this was negotiable, so for a 3000 word essay, the contact would be paid ¥400 to ¥600, and the essay writer would receive ¥2000 to ¥2400. At the time that our informant was writing essays, this amounted to a cost of around £240 to £300 per essay. Though expensive, it represents a small proportion of the cost of studying and living in the UK. Customers were encouraged by a guarantee that, if the essay failed, a resubmission would be written at no extra charge. If that failed, payment would be refunded.

Not all subjects were covered by the essay writing service. Those mentioned by the informant were all Soft Applied subjects and included Human Resources, Business Studies and Change Management. The service explicitly excluded lab reports for science and engineering degrees. However, one of the adverts on Douban (Appendix ID: 7) suggests that there are also services available that cater for this market.

4. DISCUSSION

The issue that prompted the analysis summarised above was the question of whether Sheffield University students were discussing fake references on Social Media. On Douban it seems, they were not. There was, it turned out, little discussion of coursework on Douban. The limited information we received suggests that such exchanges are more likely to take place on WeChat. The closest western equivalent to WeChat is WhatsApp, and both apps, by their nature, would be difficult to monitor.

Certainly we received evidence that some cheating is discussed and facilitated on WeChat. However, we gained no insights into the apparent increase in the strategy of faking references. Information from members of the WeChat group suggests that it is not unusual in China; and the findings of McCabe (2017) and Patel, Bakhtiyarii and Taghav (2011) indicate that it is widespread elsewhere.

It is highly likely that the practice has been occurring for some time but was not spotted until 2015. It is possible therefore, that students in that cohort were particularly poor at faking references.

All cheating is a problem, but it is less of a problem when it can be spotted with sufficient regularity to convince students that there is a high risk of detection, as is increasingly the case with plagiarism (Weber-Wulff, Möller, Touras and Zincke, 2013). Faking of references is undoubtedly unethical, but if the references selected are appropriate to the exercise then at least it has the dubious benefit of demonstrating a degree of competence and understanding. The same cannot be said of procuring essays.

There is no shortage of essay writing services available in the UK and this also appears true of China. One of the postings on Douban promised: "*Finally come to UK, but no time for social life but learning only!!! Don't worry... one message or WeChat, we will end all your concerns*" (Appendix ID: 73); and our exchange with the member of the WeChat group suggested that there may be something of a 'cottage industry' in the provision of essays written in English by academically competent Chinese students.

5. CONCLUSION

This was a short and superficial study based on a limited analysis of Douban postings. It found that they focused mostly on social and practical aspects of life as a graduate in Sheffield, with little consideration of academic matters, including strategies for cheating. A more in-depth analysis of postings covering a longer time scale, examining more threads, and analysing linkages, may yield interesting findings about the

fluctuating concerns and preoccupations of students in the course of an academic year, but the findings of this study suggest that such an analysis will reveal little about the exchange of information relating to unfair means, beyond the fact that services to assist with coursework are commercially available.

WeChat lends itself to far more confidential exchanges than Douban. It was the means used to employ the student who provided us with information about essay writing services; and WeChat and WhatsApp were the means of accessing the coursework services offered on Douban (see Appendix, ID: 73 and ID: 7 respectively). Unfortunately, unlike Douban, it is not possible to monitor exchanges on WeChat, making it hard to identify and analyse discussions relating to unfair means.

Because this was a small study based on limited evidence, any conclusions should be regarded as tentative. However, two useful suggestions can be made:

1) Postings on SNSs such as Douban seem to be significantly influenced by seasonal concerns, so universities can, at appropriate points of the academic calendar, post updates giving warnings about the consequences of cheating. If this strategy is employed, it would be worth applying the findings of the UK's Behavioural Insights Unit (Perry *et al.*, 2015) and adopting phrasing which puts a positive emphasis on social norms, rather than simply issuing threats and warnings (eg: “*Our university welcomes honest students. 95% of the students studying here never experience the disciplinary measures associated with cheating. These measures include....*”).

2) Seitz, Orsini & Gringle (2011) make the point that “*Successful cheating depends on instructor ignorance*”. There have been many studies of plagiarism, but there seems to have been little systematic study of cheating in general. Clough, Willett and Lim (2015) provide a limited summary of types of unfair means behaviour, but there is clearly scope for more research into the range and nature of different cheating strategies and techniques.

REFERENCES

- Dabbagh, N. and Kitsantas, A., 2012. Personal Learning Environments, social media, and self-regulated learning: A natural formula for connecting formal and informal learning. *The Internet and higher education*, 15(1), pp.3-8.
- Department of Education and Training, 2017. *International Student Data 2017*. [online] [Internationaleducation.gov.au](http://internationaleducation.gov.au). Available at: <https://internationaleducation.gov.au/research/International-Student-Data/Pages/InternationalStudentData2017.aspx> [Accessed 10 May 2018].
- Douban.com. (n.d. 谢菲尔德大学 Sheffield 小组). [online] Available at: <https://www.douban.com/group/sheffield/?ref=sidebar> [Accessed 10 May 2018].
- Hoffman, D.L., Novak, T.P. and Chatterjee, P., 1995. Commercial scenarios for the web: opportunities and challenges. *Journal of Computer-Mediated Communication*, Special Issue on Electronic Commerce, 1 (3).
- Jeffreys, B. and Main, E., 2018, “The YouTube stars being paid to sell cheating”, *BBC News*, 1 May, accessed May 2018 from <http://www.bbc.com/news/education-43956001>.
- McCabe, D. L. 2005. Cheating amongst college and university students: A North American perspective. *International Journal of Educational Integrity*, 1, 1.
- Office for National Statistics, 2017. *International student migration research update*. [online] ons.gov.uk. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/articles/internationalstudentmigrationresearchupdate/august2017> [Accessed 10 May 2018].
- Patel, A., Bakhtiyari, K., & Taghavi, M., 2011, Evaluation of cheating detection methods in academic writings. *Library Hi Tech*, 29(4), 623-640.
- Perry, C., Chhatralia, K., Damesick, D., Hobden, S. and Volpe, L., 2015. Behavioural insights in health care. *London: The Health Foundation*, pp.18-29.
- Seitz, C.M., Orsini, M.M. and Gringle, M.R., 2011. YouTube: An international platform for sharing methods of cheating. *International Journal for Educational Integrity*, 7(1), 57-67.
- Smith, S. D., Salaway, G., & Caruso, J. B., 2009, The ECAR study of undergraduate students and information technology, 2009. : EDUCAUSE Center for Applied Research (ECAR) Available from <http://www.educause.edu/ecar>
- U.S. Immigration and Customs Enforcement (2017). *New report notes 77 percent of international students hail from Asia*. [online] ice.gov. Available at: <https://www.ice.gov/news/releases/new-report-notes-77-percent-international-students-hail-asia-f-m-student-population-2> [Accessed 10 May 2018].
- WeChat (n.d.). Accessed on 18 September 2017 from <http://www.wechat.com/en/>.

Weber-Wulff, D., Möller, C., Touras, J., & Zincke, E. (2013). Plagiarism detection software test 2013. Portal Plagiat. Accessed on 28 April 2018 from <http://plagiat.htw-berlin.de/wp-content/uploads/Testbericht-2013-color.pdf>.
 Wikipedia (2017) Douban: Latest revision as of 06:50, 12 September 2017. Accessed on 12 March 2018 from <https://en.wikipedia.org/w/index.php?title=Douban&oldid=829763280>

APPENDIX

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