

Pervasiveness of scholastic duplicity and plagiarism among the pharmacy students in Pakistan

Sadia Shakeel*^a, Wajiha Iffat^b, Tehseen Quds^c, Nighat Tanveer^d, Sidra Hassan^e

^{a, b, c, d, e} Dow College of Pharmacy, Dow University of Health Sciences, Karachi 75280 Pakistan

^a zohad2012@gmail.com

^b wajiha.iffat@duhs.edu.pk

^c tehseen.quds@duhs.edu.pk

^d nighat.tanveer@hotmail.com

^e sidra.hassan7223@gmail.com

Abstract:

The present study was conducted with the aim to identify pharmacy students' attitude towards the plagiarism and scholastic duplicity in Pakistan. This cross sectional study was conducted from Aug till Oct 2013. A pretested 17 items questionnaire was administered to first to fifth professional pharmacy undergraduate students of different private and public sector universities of Karachi. The questionnaire sought the demographics of the students, their attitude towards the plagiarism and scholastic duplicity in Pakistan. Descriptive statistics on the sample characteristics including percentages were computed. One way ANOVA was used to determine the influence of gender, institute and professional year on their responses. More than 75% of the students copy another student's work without their knowledge. More that 60% of the students submit the assignment that has already been assessed. More than 55% utilize the efforts of their colleagues to write assignment or part of the assignment and considered to pass off other ideas/ images/design as their own. On the other hand, more than 55 % of the pharmacy undergraduate students did not used concealed information in examination and only 1.82% invents references themselves. Pharmacy is a noble profession in which the students are trained to be an ethical health care professional .There is a great need of time to properly educate students about the policy regarding plagiarism to cut down the trend of increased rate of cheating and plagiarism. Specific procedures should be developed to become more vigilant about the cheating behaviors of students.

Keywords: Plagiarism; academic duplicity; Pharmacy undergraduate students; Pakistan

1. Introduction

Pharmacy students' behavior and their way of thinking, during their Pharm.D program make a significant constitution for their continuing pharmacy practice. Particular emphasis is on those behaviors and attitudes that belong to academics truthfulness and dishonesty[1]. Storch and Storch define academic dishonesty as “. . . the act of giving or receiving unauthorized assistance in an academic task, or receiving credit for plagiarized work”[2]. In this regard, Plagiarism is of important concern and is defined as stealing of another's idea, work, invention, results and words without giving suitable honor or acknowledgment and demand as one's own [3-5]. Plagiarism has its roots in primordial era but it remains out of sight from the public stare until the mass-produced writing. Incidences of plagiarism also recorded in scientific community 200 years ago [4, 6]. 90% undergraduate students were found victim of academic deceitfulness [7-9]. Students plagiarize in different ways which includes; stealing matter from other source and make it as their own, presents or submit a paper of someone else and represent it as their own, copying matter from other source with proper references but quit quotation marks which shows that it is paraphrase rather directly copied, without suitable acknowledgment paraphrase the matter from one or more text sources [10-13]. Plagiarism by students is an ethical issue as it highlights significant moral queries about acceptable and unacceptable practices including good or bad and right or wrong behavior. It is a matter of importance to identify plagiarism in educational institutes and increase the awareness about it by teaching because it is a harmful matter and the ratio is increased because students adopted it as an easiest tool to gain good positions and grades and this attitude make them dishonest. In future when these students enter in professional life they may showed them not a good professionals because of lack of knowledge [4, 5, 14, 15]. One most important factor that now rate of plagiarism is increased because of the easy access of the information available on internet and electronic media and because of just clicking “copy and paste” option it's easier to plagiarize the material [3-5, 16, 17].

Another leading cause of academic plagiarism is that the student's behaviors are much influenced by their peers behaviors especially if they find them involve in academic dishonesty [8, 18, 19]. Greater pressure on students from their respective schools or institutions and over burdenizing them to get good ranks to compete the world also evokes the students to do plagiarism[8, 20, 21]. Academic duplicity is also influenced by gender. The ratio of academic dishonesty is lower in females as compared to male students because of higher level of anticipated shame and in males ratio is higher because of lower level of self control and anticipated shame [8, 19, 22-24].

Some students do not consider plagiarism as an awful act and perceive no basis why they should not plagiarise. There is no faltering in saying that that some students cheat more than others. There are several reason that why the students cheat [5, 25-27]. Some students plagiarise not deliberately because of their lack of understanding towards the plagiarism, they have lack of awareness of appropriate ways of quoting, referencing and paraphrasing. Some students plagiarise to get a good academic record and better grade with no time and efforts. Those students who have low GPAs usually cheat and those students who involved in cheating in their past i.e. in their high schools and colleges are more likely indulge in academic dishonesty in professional life as well [8, 22, 28]. Dynamic social life, family responsibilities, extracurricular activities, and stress to complete several work assignments in short amounts of time involves students in plagiarism. Some students believe that plagiarism is a concrete way of showing hostility and articulating a lack of respect for authority. It is persuasive and easier to plagiarise as information can be easily accessed by using Internet and web search tools. Some students have the school of thought that the benefits of plagiarising outweigh the risks[29-31]. There are few published studies investigating academic dishonesty among pharmacy students in Pakistan. Therefore the present study was conducted with the aim to identify pharmacy students' attitude towards the plagiarism and scholastic duplicity in Pakistan.

2. Material and methods:

This cross sectional study was conducted from Aug till Oct 2013. First to fifth professional pharmacy undergraduate students of different private and public sector universities of Karachi were selected randomly as the study population. The questionnaires were distributed in class rooms and tutorials after giving the brief description about the purpose of study to the participants. Prior to initiate the study ethical approval was taken from every institution's head of department involved in the study. Every participant was informed about the intention of the study and their

consent was taken verbally. The involvement of students was intentional and identity of each student was anonymous. The students were secured about the confidentiality of their personal information and responses. All of the selected students were enrolled in Doctor of pharmacy (Pharm. D) program and were agreed to contribute in the study. A pretested 17 items questionnaire used in another research was adopted and modified [1]. Five-point Likert scale was used to evaluate the response of the participants ranging from 5 = “Never” to 1 = “Always.” Out of 750 questionnaires, 602 were returned back in useable form. Hence the response rate was 80.26%. The questionnaire sought the demographics of the students, their attitude towards the plagiarism and scholastic duplicity in Pakistan. The completed questionnaires were entered for further analysis into Statistical Package for Social Sciences (SPSS 20.0). Descriptive statistics on the sample characteristics including percentages were computed. One way ANOVA was used to determine the influence of institute, gender and professional year on their responses. A level of p value < 0.05 was considered as significant.

3. Result and discussion:

Plagiarism can be considered as the utilization of another person’s ideas, words, progressions or outcomes without giving appropriate recognition to one who is the creator of those words or ideas [5, 26]. It is apparent from vast researches that academic misconduct has a well developed trend of cheating in general, and plagiarism in particular and it is becoming a frequent practice among the students [25, 27, 32]. The term “epidemic cheating” is used by Alschuler and Blimling (1995) for such cheating and plagiarism behavior [33]. Students are habitual of cheating because of the timely submission of their assignments. Plagiarism is an effortless job for the students that involves simply the downloading the required information for their given assignments and copy it through one click only. Another cause towards academic dishonesty is the submission of grouped assignments which put burdens on some of the students while others do not perform their assigned task. This creates negative impact on moral behavior and academic misbehavior. Securing a high grade point average (GPA) is another cause of academic dishonesty among the students. It is evident from different studies that the students cheat for achieving high GPA which is going low while some others cheat because they need to maintain or boost up their academic records [34-36].

There are few published studies investigating academic dishonesty among pharmacy students. Therefore the study was conducted with the aim to explore the prevalence of academic misconduct and to identify pharmacy students’ attitude towards the plagiarism and scholastic duplicity in Pakistan.

The present study was conducted on first to fifth professional pharmacy undergraduate students of different private and public sector universities of Karachi, Pakistan. Out of 750 questionnaires, 602 were returned back in useable form. Hence the response rate was 80.26%. The demographic data is shown in Fig.1.

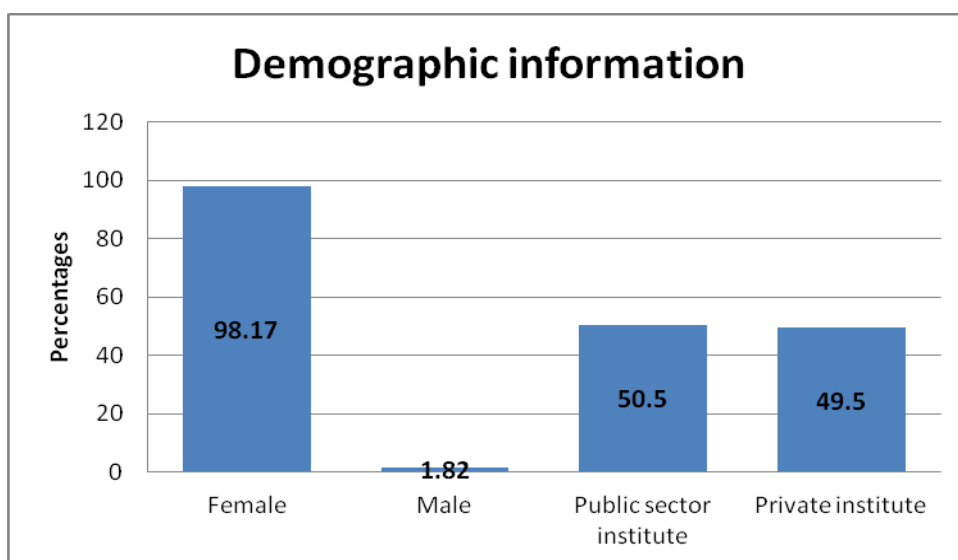


Fig.1 Characteristics of the students

The study population comprised of 98.17% females. The respondents belonging to public sector and private institutes were 50.5% and 49.5% respectively. Professional year of students is illustrated in Fig.2. The students belonging to first, second, third, fourth and final year were 18%, 17%, 20%, 23% and 22% respectively.

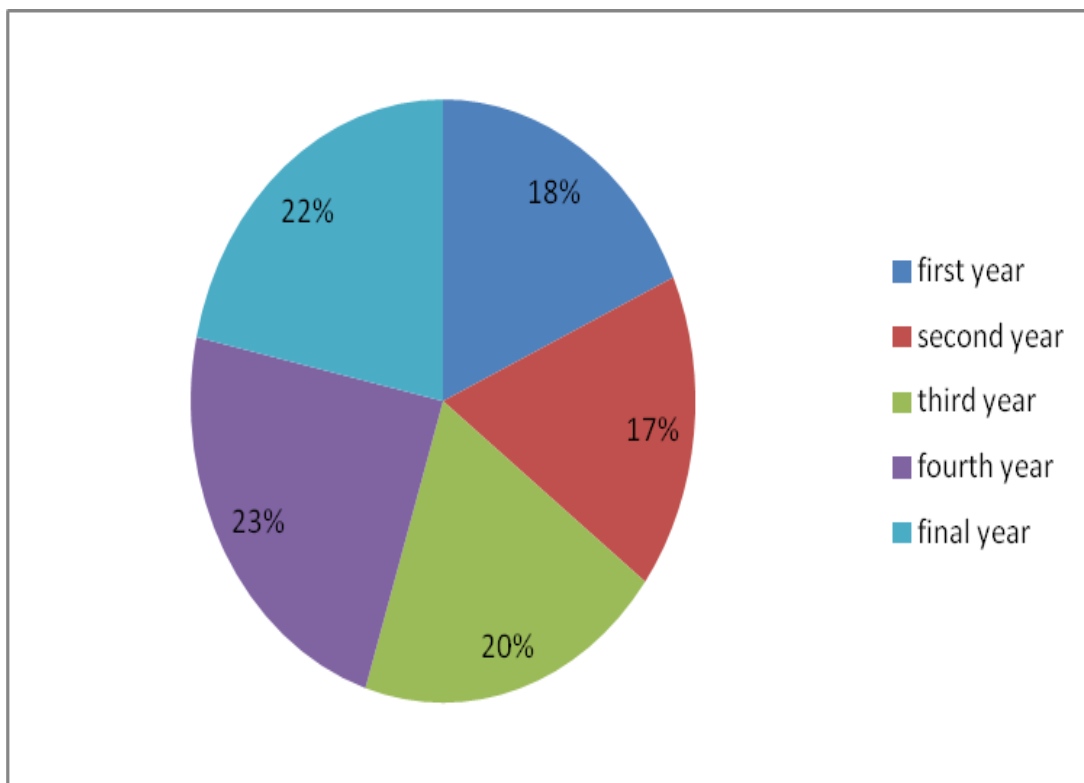


Fig.2 Professional year of participants

The response of the students regarding their behavior towards plagiarism is recorded in table 1. In general the responses of the students towards the practices they follow during academic activities were having multiple responses. More than 75% of the students copy another student's work without their knowledge. More than 60% of the students submit the assignment that has already been assessed. More than 55% utilize the efforts of their colleagues to write assignment or part of the assignment. 58.80% of the respondents considered to pass off other ideas/ images/design as their own. 46% always considered to include someone else words in their assignment without referencing properly. On the other hand, more than 55% of the students did not use concealed information in examination. Participants (70.93%) contribute their share only to a group assignment. Only 1.82% invent references themselves and 8.97% of the respondents never considered to quote an important passage by copying but exact words with quote marks and enter all sources in the reference list. Not more than 8.47% and 11.62% of the students never share their source material with a friend who is working on a same topic and borrowed material from different sources and connecting to make paragraph respectively.

Table 1: Students' response to the questionnaire

Behavior	Never	Sometimes	Often	Usually	Always
Use concealed information in an examination	347 (57.64)	114 (18.93)	56 (9.30)	48 (7.97)	37(6.14)
Discuss an assignment with friends	19 (3.15)	140 (23.25)	126 (20.93)	134 (22.25)	183 (30.39)
Quote a paragraph exactly with the quote marks, indentation, in text reference and entry in the reference list	142 (23.58)	180 (29.9)	154 (25.58)	78 (12.95)	48 (7.97)
Invent references yourself because you have forgotten to note the source details	290 (48.17)	203 (33.72)	42 (6.97)	56 (9.30)	11 (1.82)
Include someone else's words in your assignment without referencing properly	42 (6.97)	22(3.65)	58 (9.63)	203 (33.72)	277 (46.01)
Get somebody else to write your assignment/part of your assignment	9 (1.49)	14 (2.32)	56 (9.30)	174 (28.90)	349 (57.97)
Submit an assignment that has already been assessed	17 (2.82)	21 (3.48)	42 (6.97)	150 (24.91)	372 (61.79)
Download material from the web and including in your assignment without a reference	26 (4.31)	72 (11.96)	89 (14.78)	200 (33.22)	215 (35.71)
Not contribute your share to a group assignment	427 (70.93)	96 (15.94)	30 (4.98)	28 (4.65)	21 (3.48)
Copy another student's work without their knowledge	30 (4.98)	34 (5.64)	18 (2.99)	66 (10.96)	454 (75.41)
Borrow material from different sources and connecting to make paragraph	70 (11.62)	153 (25.41)	130 (21.59)	173 (28.73)	76 (12.62)
Copy another student's work with their knowledge	186 (30.89)	216 (35.88)	88 (14.61)	64 (10.63)	48 (7.97)
Use information from a source with lots of changes in language and organization	119 (19.76)	207 (34.38)	106 (17.60)	118 (19.60)	52 (8.63)
Composing a paragraph by taking short phrases from a number of sources and putting them together also adds your own words and enter all sources in the reference list	34 (5.64)	197 (32.72)	104 (17.27)	175 (29.06)	92 (15.28)
Quote only an important passage by copying the exact words with quote marks and enter all sources in the reference list	54 (8.97)	190 (31.56)	118 (19.60)	133 (22.09)	107 (17.77)
Agree to share source material with a friend who is working on the same topic	51 (8.47)	173 (28.73)	48 (7.97)	107 (17.77)	223 (37.04)
Pass off others' ideas/images/designs as your own	25 (4.15)	71 (11.79)	45 (7.47)	106 (17.60)	354 (58.80)

One way ANOVA was adopted using 0.05 level of significance to observe the effect of institute, gender and professional year on their response. The influence of gender, institute and professional year on their response is shown in table-2. It shows that professional year of students, institutes and gender have significant effect on their responses.

Table 2: Influence of gender, institute and professional year of students on their response.

Behavior	Gender		Institute		Professional year	
	F	Sig.	F	Sig.	F	Sig.
Use concealed information in an examination	5.564	0.018*	14.783	0.000*	7.083	0.000*
Discuss an assignment with friends	0.594	0.441	70.009	0.000*	8.374	0.000*
Quote a paragraph exactly with the quote marks, indentation, in text reference and entry in the reference list	1.171	0.279	3.962	0.047*	1.681	0.153
Invent references yourself because you have forgotten to note the source details	4.157	0.041*	0.157	0.691	1.650	0.159
Include someone else's words in your assignment without referencing properly	0.085	0.771	6.460	0.011*	1.870	0.114
Get somebody else to write your assignment/part of your assignment	0.053	0.818	1.552	0.213	2.293	0.058
Submit an assignment that has already been assessed	2.844	0.092	16.706	0.000*	6.960	0.000*
Download material from the web and including in your assignment without a reference	3.143	0.076	4.927	0.026*	5.123	0.000*
Not contribute your share to a group assignment	0.103	0.748	15.201	0.000*	3.102	0.015*
Copy another student's work without their knowledge	0.063	0.802	26.748	0.000*	4.164	0.002*
Borrow material from different sources and connecting to make paragraph	0.714	0.398	4.292	0.039	0.938	0.441
Copy another student's work with their knowledge	0.085	0.771	2.502	0.114	3.485	0.007*
Use information from a source with lots of changes in language and organization	0.997	0.318	1.660	0.198	10.268	0.000*
Composing a paragraph by taking short phrases from a number of sources and putting them together also adds your own words and enter all sources in the reference list	0.033	0.855	1.416	0.234	5.742	0.000*
Quote only an important passage by copying the exact words with quote marks and enter all sources in the reference list	1.386	0.239	1.704	0.192	4.040	0.003*
Agree to share source material with a friend who is working on the same topic	0.193	0.661	9.966	0.002*	7.118	0.000*
Pass off others' ideas/images/designs as your own	0.006	0.937	16.152	0.000*	10.048	0.000*

In the table-2 value of sig. < 0.05 considered as significant.

Several researchers have reported the prevalence of academic misconduct among students in various academic institutes in USA [37-39]. Similar trend was observed in our study that majority of the students were involved in such academic misconduct activities like copying another student's work without their knowledge, submitting the assignment that has already been assessed, utilizing the efforts of their colleagues to write assignment or part of the assignment, passing off other ideas/ images/design as their own etc. A balanced approach should be taken while dealing with academic duplicity and plagiarism including both detection and prevention [25, 27]. McInnis and Devlin [39] proposed a strategy to minimize plagiarism consisting of four parts:

- To develop a collaborative effort at every level by developing and implementing policy to recognize plagiarism at institutional level that prevails consistently.
- To educate students about the appropriate use and acknowledgment of intellectual material
- To design approaches that support students' learning thereby minimizing the opportunity for students to put forward the plagiarized material
- To develop and implement the procedures for monitoring and detecting cheating and other similar practices. They should be informed about the punishment and penalties that are transparent and consistently applied in an institution to reduce plagiarism.

The teaching methodologies must concentrate on learning process of students to improve their understanding of sincerity towards the academic activities. It truly will contribute a lot in developing the honest behavior of student's for their academics. The students must be properly educated about the policy regarding plagiarism to cut down the trend of increased rate of cheating and plagiarism.

4. Conclusion:

Pharmacy is a noble profession in which the students are trained to be an ethical health care professional. There is a great need of time to address the issues involving academic duplicity as this trend is prevailing very commonly among the pharmacy students. The students must be properly educated about the policy regarding plagiarism to cut down the trend of increased rate of cheating and plagiarism. Specific procedures should be developed to become more vigilant about the cheating behaviors of students. They should be informed about the punishment and penalties that are transparent and consistently applied in an institution to reduce plagiarism.

Conflict of Interest:

Author declared no conflict of interest.

Acknowledgement:

None

References:

- [1] G. Ryan, H. Bonanno, I. Krass, K. Scouller, and L. Smith, "Undergraduate and postgraduate pharmacy students' perceptions of plagiarism and academic honesty," *American journal of pharmaceutical education*, vol. 73, 2009.
- [2] S. JB, "Fraternities, sororities, and academic dishonesty," *College Student Journal*, vol. 36, pp. 247-252, 2002.
- [3] M. J. Austin and L. D. Brown, "Internet plagiarism: Developing strategies to curb student academic dishonesty," *The Internet and higher education*, vol. 2, pp. 21-33, 1999.
- [4] S. CMJ, "Prevalence of plagiarism among medical students," *Croat Med J*, vol. 46, pp. 126-31, 2005.
- [5] S. K. Das, "OPINION: Plagiarism in Higher Education: Is There a Remedy? Lots of instruction and some careful vigilance could work wonders," *Scientist*, vol. 17, pp. 8-8, 2003.
- [6] T. Hansen, "Neonatal jaundice and scientific fraud in 1804," *Acta Paediatrica*, vol. 91, pp. 1135-1138, 2002.
- [7] S. F. Davis, C. A. Grover, A. H. Becker, and L. N. McGregor, "Academic dishonesty: Prevalence, determinants, techniques, and punishments," *Teaching of Psychology*, vol. 19, pp. 16-20, 1992.

- [8] S. M. Rabi, L. R. Patton, N. Fjortoft, and D. P. Zgarrick, "Characteristics, prevalence, attitudes, and perceptions of academic dishonesty among pharmacy students," *American journal of pharmaceutical education*, vol. 70, 2006.
- [9] F. Sierles and I. Hendrickx, "Cheating in medical school," *Academic Medicine*, vol. 55, pp. 124-5, 1980.
- [10] D. S. Brandt, "Techman's techpage: copyright's (not so) little cousin, plagiarism," *Computers in libraries*, vol. 22, pp. 39-41, 2002.
- [11] C. Park, "In other (people's) words: Plagiarism by university students--literature and lessons," *Assessment & Evaluation in Higher Education*, vol. 28, pp. 471-488, 2003.
- [12] H. RM, "Don't police plagiarism: just teach!," *Education Digest*, vol. 67, pp. 46-49, 2002.
- [13] S. Wilhoit, "Helping students avoid plagiarism," *College teaching*, vol. 42, pp. 161-164, 1994.
- [14] M. Hrabak, A. Vujaklija, I. Vodopivec, D. Hren, M. Marušić, and A. Marušić, "Academic misconduct among medical students in a post-communist country," *Medical Education*, vol. 38, pp. 276-285, 2004.
- [15] J. R. Walker, "Copyrights and conversations: Intellectual property in the classroom," *Computers and Composition*, vol. 15, pp. 243-251, 1998.
- [16] D. DeVoss and A. C. Rosati, "'It wasn't me, was it?' Plagiarism and the Web," *Computers and composition*, vol. 19, pp. 191-203, 2002.
- [17] D. Grover, "Plagiarism and the internet: The use of correlation techniques to detect plagiarism," *Computer Law and Security Report*, vol. 19, pp. 6-8, 2003.
- [18] K. B. Gaberson, "Academic dishonesty among nursing students," in *Nursing Forum*, 1997, pp. 14-20.
- [19] D. L. McCabe and L. K. Trevino, "Individual and contextual influences on academic dishonesty: A multicampus investigation," *Research in Higher Education*, vol. 38, pp. 379-396, 1997.
- [20] C. Kleiner and M. Lord, "The cheating game," *US News & World Report*, vol. 127, pp. 54-63, 1999.
- [21] C. A. Tanner, "Moral decline or pragmatic decision making?: Cheating and plagiarism in perspective," *The Journal of nursing education*, vol. 43, p. 291, 2004.
- [22] D. Baldwin Jr, S. R. Daugherty, B. D. Rowley, and M. Schwarz, "Cheating in medical school: a survey of second-year students at 31 schools," *Academic Medicine*, vol. 71, pp. 267-73, 1996.
- [23] M. A. Elzubeir and D. E. Rizk, "Exploring perceptions and attitudes of senior medical students and interns to academic integrity," *Medical education*, vol. 37, pp. 589-596, 2003.
- [24] S. G. Tibbetts, "Differences between women and men regarding decisions to commit test cheating," *Research in Higher Education*, vol. 40, pp. 323-342, 1999.
- [25] K. de Lambert, N. Ellen, and L. Taylor, "Chalkface challenges: a study of academic dishonesty amongst students in New Zealand tertiary institutions," *Assessment & Evaluation in Higher Education*, vol. 31, pp. 485-503, 2006.
- [26] F. Gilbert and A. Denison, "Research misconduct," *Clinical radiology*, vol. 58, pp. 499-504, 2003.
- [27] D. L. McCabe, "It Takes a Village: Academic Dishonesty & Educational Opportunity," *Liberal Education*, vol. 91, pp. 26-31, 2005.
- [28] D. L. McCabe and L. K. Trevino, "What We Know About Cheating In College Longitudinal Trends and Recent Developments," *Change: The Magazine of Higher Learning*, vol. 28, pp. 28-33, 1996.
- [29] P. G. Love and J. Simmons, "Factors influencing cheating and plagiarism among graduate students in a college of education," *College Student Journal*, 1998.
- [30] G. E. Stevens and F. W. Stevens, "Ethical inclinations of tomorrow's managers revisited: How and why students cheat," *Journal of Education for Business*, vol. 63, pp. 24-29, 1987.
- [31] D. Straw, "The plagiarism of generation 'why not?'," *Community College Week*, vol. 14, pp. 4-7, 2002.
- [32] P. Ashworth, P. Bannister, P. Thorne, and S. o. t. Q. R. M. C. Unit, "Guilty in whose eyes? University students' perceptions of cheating and plagiarism in academic work and assessment," *Studies in Higher Education*, vol. 22, pp. 187-203, 1997.
- [33] A. S. Alschuler and G. S. Blimling, "Curbing epidemic cheating through systemic change," *College Teaching*, vol. 43, pp. 123-125, 1995.
- [34] R. Aggarwal, I. Bates, G. Davies, and I. Khan, "A study of academic dishonesty among students at two pharmacy schools," *Pharmaceutical journal*, vol. 269, pp. 529-533, 2002.
- [35] Z. Austin, D. Collins, A. Remillard, S. Kelcher, and S. Chui, "Influence of attitudes toward curriculum on dishonest academic behavior," *American journal of pharmaceutical education*, vol. 70, 2006.
- [36] M. McCullough and M. Holmberg, "Using the Google Search Engine to Detect Word-for-Word Plagiarism in Master's Theses: A Preliminary Study," *College Student Journal*, 2005.
- [37] D. L. McCabe and L. K. Trevino, "Cheating among business students: A challenge for business leaders and educators," *Journal of Management Education*, vol. 19, pp. 205-218, 1995.

- [38] S. E. Newstead, A. Franklyn-Stokes, and P. Armstead, "Individual differences in student cheating," *Journal of Educational Psychology*, vol. 88, p. 229, 1996.
- [39] R. James, C. McInnis, and M. Devlin, "Minimising plagiarism," *Assessing learning in Australian universities*, 2002.