

# Academic Dishonesty Among Pharmacy Students

## Investigating Academic Dishonesty Behaviours in Undergraduates

HEI WAN WENDY NG<sup>a</sup>, GRAHAM DAVIES<sup>a</sup>, IAN BATES<sup>b,\*</sup> and MONICA AVELLONE<sup>b</sup>

<sup>a</sup>School of Pharmacy and Biomolecular Sciences, University of Brighton, Brighton, UK; <sup>b</sup>School of Pharmacy, University of London, 29-39 Brunswick Square, London, WC1N 1AX, UK

(Received 15 August 2003; In final form 27 October 2003)

In previous studies, academic dishonesty was found to be common among pharmacy students. The aim of this investigation was to find the reasons for dishonest behaviour among pharmacy students. Twelve semi-structured interviews were carried out with first and fourth year pharmacy students, chosen to represent a broad spectrum of views about academic dishonesty. Five principle themes were identified as the motivations for student academic dishonesty: institutional environment, study skills, assessment employed, personal qualities and course specific factors.

The results show that the motivational themes for dishonesty varied between the first year students and the fourth year students. The first year students interviewed, when compared to the fourth year students, were generally more uncertain about the definition of academic dishonesty, and consequently the behaviours associated with it. The first year students also appeared to possess poorer study skills and complained that the university failed to provide enough academic support.

In contrast, the fourth year students interviewed were more sophisticated in their approach to academic dishonesty. They frequently mentioned pressure and stress as motivational factors leading some students to resort to dishonest behaviours. They were also more aware of the opportunities to engage in dishonest academic behaviour than first year students and generally believed engaging in dishonest behaviour was an institutional culture.

All the students interviewed stated that engaging in dishonest behaviour could be motivated by peer pressure, fulfilling their social and esteem needs. Dishonest behaviour could be a way to increase social acceptance and to fit into a group. Students from both years were found to be goal orientated with poor study skills appearing to motivate dishonest behaviour.

*Keywords:* Academic dishonesty; Students; Pharmacy education; Royal pharmaceutical society

## INTRODUCTION

“Academic dishonesty has been defined as the act of giving or receiving unauthorized assistance in an academic task or receiving credit for plagiarized work.” (Storch and Storch, 2002). Pharmacy students are the future workforce of the profession and high standards of personal and professional conduct are expected by the Royal Pharmaceutical Society, the greater medical community and the general public. A recent study carried out at two schools of pharmacy in England found that academic dishonesty was common among pharmacy students, with up to 80% of students admitting to at least one incident of academic dishonesty (Aggarwal *et al.*, 2002). Students were most likely to participate in scenarios considered by academic staff to be less serious, these included: handing down work to lower years, website “cut and paste”, marking peer coursework leniently, borrowing coursework for ideas and asking a neighbour questions in practical examinations.

A study by Nonis and Swift (2001) involving business students, found a high correlation between the frequency of cheating at college and cheating at work. Those who cheated in the academic setting tended to also cheat in the corporate setting. The results indicate that once an individual forms the attitude that cheating is acceptable, he or she is likely to use this behaviour, not only in the educational arena, but also in other areas.

\*Corresponding author. E-mail: ian.bates@ulsop.ac.uk

## Achievement

According to Newstead *et al.* (1996), there is less incidence of cheating among more successful students. Correspondingly, Hetherington and Feldman (1964) found that individuals with lower intelligence and lower grades tend to cheat more. DeVoss and Rosati (2002) report that students are more likely to cheat when they have a poor understanding of an assignment or are short of knowledge.

Students who cheat are more motivated by high grades than by the acquisition of knowledge (Anderman *et al.*, 1998). Students feel pressure from their parents, graduate school admissions offices, corporate recruiters and themselves to maintain high grades (McCabe and Trevino, 1996). A study conducted by Norton *et al.* (2001) suggests that students cheat due to assessment pressure and fear of failure. According to Singhal (1982), the main reason for cheating is competition for grades.

## Personal Factors and Characteristics

Many studies report that male students admit to a significantly higher incidence of academic dishonesty than female students (Hetherington and Feldman, 1964; Norton *et al.*, 2001; Aggarwal *et al.*, 2002). However, in their study of students at Penn State University in the United States, Roig and DeTommaso (1995) found no statistical significant difference between genders. The study was conducted using a scale to access the perception of cheating in examination related scenarios. Interestingly, the same scale was used by Caruana *et al.* (2000) to study the perceived dishonest behaviour of university students in Australia. They found that male students exhibited a higher tendency toward plagiarism than females. These variations may suggest cultural differences.

Murdock *et al.* (2001) report that students who engage in dishonest behaviour tend to feel they are unable to complete the task sufficiently well. Therefore, low self-efficacy could contribute to cheating behaviour. Students who exhibit self-handicapping behaviour, such as blaming others for their own failure and making excuses for not doing well, are more likely to participate in cheating (Anderman *et al.*, 1998).

## Institutional Factors

More students were found to cheat in examinations in larger schools compared with smaller institutions (Thorpe *et al.*, 1999). This could be due to the large class sizes typically found at bigger institutions, which may afford more cheating opportunities.

Evans and Craig (1990) found that students were more likely to cheat if teachers were disorganized,

failed to take steps to prevent cheating, were unfriendly to students, exhibited poor communication or had high expectations for student performance. In a study conducted by Murdock *et al.* (2001), a positive association was found between students' self-reported cheating and their dislike of school, teachers and an overall view of school as unfair.

There is a general belief among students that they will not be caught and if they are, punishments will be lenient (McCabe and Trevino, 1996). According to Singhal (1982), this may very well be true. Singhal found that 56% of the students surveyed admitted to having cheated, but only 3% admitted to having been caught. A study undertaken by Bjorklund and Wenestam (1999) stated that in a study of 500 university professors, 20% reported that they had decided not to take further measures in cases of cheating, as many of the lecturers felt that stress and discomfort would follow.

At times students do not appear to know what is considered cheating, nor the punishment (Ashworth *et al.*, 1997). Franklyn-Stokes and Newstead (1995) found students to be ill-informed about the correct or "honest" practice. This could be attributed to schools and universities not disseminating information about their policies and views on academic dishonesty, or indeed having no clear policy in place.

## Reasons for Not Cheating

A study carried out by Ashworth *et al.* (1997) identified that students feel it is not fair to other students to cheat, as they are all "in competition" with each other. Many felt that cheating would involve the "betrayal" of the other students. Other reasons mentioned were it was unnecessary, pointless, immoral and dishonest.

A study by Bjorklund and Wenestam (1999) showed the most common reason for not cheating was that it is immoral and dishonest. Table I shows the reasons given for not cheating.

It is important to note that studies have found it difficult to make meaningful comparisons across different academic dishonesty studies. Problems attributing to this include the measurement of different cheating behaviours, time and timing differentials,

TABLE I Reasons given for not cheating

Reasons for not cheating:
Immoral and dishonest;
Devaluing achievement;
Personal pride;
Shame and embarrassment at being caught;
Fear of detection and punishment;
Not knowing how to go about it;
No available opportunities;
Being unfair to other students.

using different sample and class sizes, conducting studies in different types of institutions, and an increase in the willingness of students to report cheating behaviour as it becomes more acceptable (Brown and Emmett, 2001).

## PROJECT AIMS

A recent quantitative study conducted by Aggarwal *et al.* (2002) at two schools of pharmacy in England found that academic dishonesty was common among pharmacy students. This project is a follow-up study designed to investigate the reasons for such dishonest behaviours among students at a single school of pharmacy. A series of semi-structured interviews with first year and fourth year pharmacy students to investigate the range of reasons driving dishonest behaviour were conducted.

## METHOD

### Construction of the Interview Guide

An interview guide was developed as an instrument for data collection. It comprised a series of open-ended questions based on themes described in a recent study (Aggarwal *et al.*, 2002), which aimed to understand the motivation for engaging in dishonest behaviour.

The interview guide was composed of four sections, the introduction, the definition, the reasons for the behaviours and the consequences. The questions were deliberately developed in order to start the interview with some basic introductory questions aimed to collect factual data and to put the student at ease. More specific questions were then asked to investigate the students' understanding of academic dishonesty and what motivations they felt might influence students to engage in this activity.

A pilot study using two students (one home student and one overseas) was conducted before the major data collection for clarity and appropriateness, and the interview guide was revised based on the problems identified from the pilot interviews.

### Sample Selection

The study sample (12 students) was selected from first year and fourth year pharmacy students attending the School of Pharmacy and Biomolecular Sciences, University of Brighton. Six students from the first year and six from the fourth year were chosen in an attempt to provide a broad view about academic dishonesty. Taking into consideration previous studies, several factors were used as criteria for stratifying the sample: age, gender, year of study

TABLE II Study Sample

Key characteristics	First year students	Final year students
Gender	3 Male, 3 Female	3 Male, 3 Female
Mature students	3	2
Overseas students	1	1

and ethnic background. A summary of the study sample is shown in Table II. A random numbers table was used to select the sample according to the stratification criteria.

After ethical committee approval, consent letters were sent to the twelve individuals selected requesting their participation. Several first year students refused to be involved in the interview and other students were then selected using the random sampling process. All interviews were carried out in a quiet and private environment. The twelve one-to-one, semi-structured interviews were conducted according to the interview guide, recorded and transcribed maintaining strict ethical standards. Recording the interview was essential to ensure that meaning was not lost or distorted, and enabled quotations to be used as illustrative material. Participants were assured that their responses would remain confidential and anonymous. The recordings were later erased after all the interviews were transcribed.

### Transcribing and Coding

The transcripts were highlighted with reflective notes in the margins. The marginal notes were used later in the coding cycle.

In order to develop a coding scheme, the codes were loaded onto the multifunctional software system QSR NUD\*IST.

In order to ensure the validity and reliability of the data collected the coding process was undertaken separately by two researchers.

## RESULTS AND DISCUSSION

Twelve interviews were completed with six first year and six fourth year pharmacy students (Table II). From the interview transcripts, five principal themes influencing dishonest behaviour were identified: institutional environment, study skills, assessment employed, personal qualities and course specific factors. A further 22 sub-themes were classified under each of these five principal themes (Fig. 1).

### Institutional Environment

The institutional environment could have a dramatic effect on the incidence of academic dishonesty.

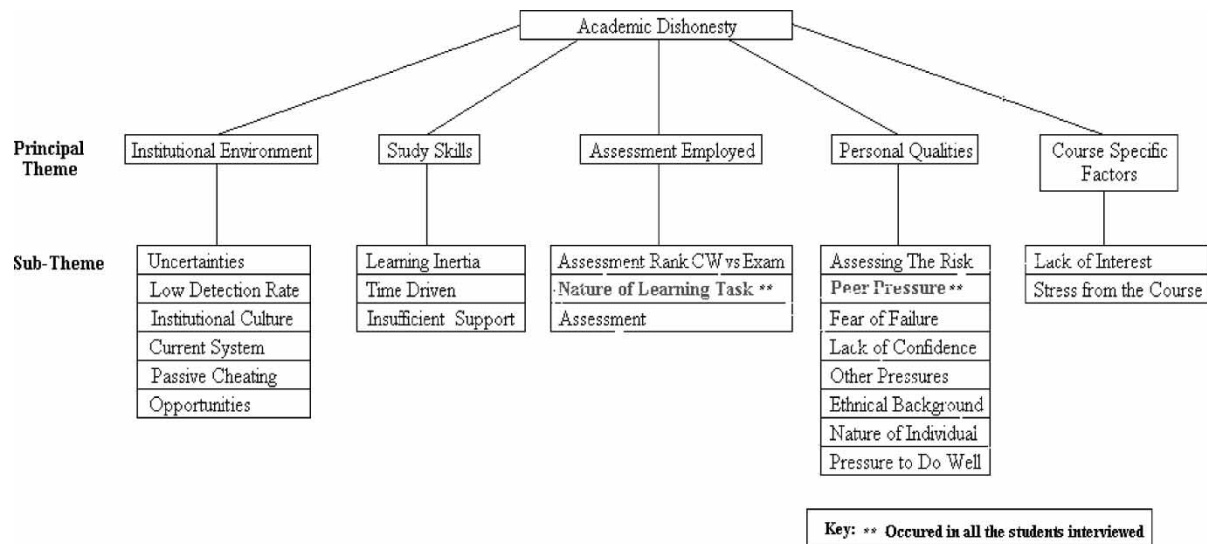


FIGURE 1 The principal and sub- themes influencing academic dishonesty in pharmacy students.

In order to gain insight into the institutional environment, the theme will be discussed in two parts.

### Uncertainties

Broadly, the students interviewed were uncertain about the definition of dishonest behaviours, cheating and plagiarism. This has also been found in previous studies (Ashworth *et al.*, 1997).

However, there were differences between the years of study regarding the uncertainty about cheating and plagiarism. First year students were simply just not clear about the definitions of cheating and plagiarism.

“But, not acknowledging is quite dodgy, you are claiming and it’s not true. So, not acknowledging it can be dodgy. But, sometimes, there’s something that you don’t acknowledge from the Internet, and I think that’s ok, because it’s a general overview of things.” (Document 4, 129–139)

“Borrowing and copying another student’s coursework with [their] permission, that is more or less likely; I don’t really think it would be cheating, like borrowing to get ideas.” (Document 5, 123–129)

On the other hand, the views of the fourth year students were much more sophisticated. These students appeared to be aware of a grey area between honest behaviours and academic dishonesty and had a more sophisticated understanding of the boundaries between the two. Words like “borderline”, “fine line” and “grey area” were often found in the interview transcripts.

“I think there is a fine line between helping a colleague and cheating. If you are giving them work to understand it, and they put it in practice, then this is kind of called cheating, yeah. So, it’s a colleague that is helping you. So what’s the difference of a personal tutor helping you and a fellow student? It depends which way you are looking at it.” (Document 11, 386–396)

Students were also uncertain about the penalties imposed by the university if caught engaging in dishonest behaviours. They assumed they could be serious, but only had a vague idea about the actual consequences.

“I am not quite sure about what the current system is, and the only thing that I’ve seen written down is in extreme circumstances for people to be removed from course, I don’t know what the interim steps are between that, so it’s difficult to say it’s fair.” (Document 12, 259–267)

### Opportunities and Culture

Students frequently talked about the many opportunities present for dishonest behaviour. One fourth year student explained:

“If the people have the opportunity to cheat at any point, then why not continue for all the years? Because they can have time out in the first and second years and get good marks for their final degree for the final two years, so I would say, possibly, if the people have the opportunity to cheat, they might cheat for the whole time.” (Document 10, 209–222)

Overall, perhaps unsurprisingly, fourth year students were more aware of the opportunities to engage in dishonest behaviours. The opportunities they described were much more detailed and in-depth compared to first year students.

“The same experiment is used year after year or the same exercise, I think that probably encourages dishonesty.” (Document 10, 154–158)

“If the exam is MCQ for example, if you sit in a certain position, you can see other people’s...” (Document 7, 259–262)

First year students were discovering where the opportunities for academic dishonesty exist.

In particular, they talked about the ease of getting hold of the upper year students' work.

"It's very easy to get hold of a student's works, a student in a year above, it's very easy for someone to know." (Document 6, 183–186)

In many courses at the university the same coursework was set every year, which provided students an opportunity to copy. A university induction event offered an opportunity to get to know upper year students. This took the form of students from the year above "adopting" new students to introduce them to academic life—the so called "brother and sister night".

"So you then if you do get a pharmacy 'brother' or 'sister', you can then ask your pharmacy 'brother' or 'sister' for their work. They do give it, like they don't hesitate, because they want to help you. They just give you everything you ask for. Then...friends...just swap work, because everybody has different people, and the better grades are the ones to use." (Document 8, 388–400)

The students perceive there to be a low detection rate of dishonest behaviour and this may increase the occurrence of academic dishonesty.

"I am not aware of anybody being caught cheating." (Document 12, 258–259)

"They [the tutors] tell you the consequence, but you don't understand it, because you haven't seen it; um, you have no real feeling of what they are you know?...but the problem is you never see anyone get caught." (Document 7, 412–417, 545–547)

The majority of the students from both years perceived that some of the dishonest behaviours became more or less a culture or tradition. The opportunities for dishonesty within the academic environment could contribute to the institutional culture of dishonesty found.

"If the other students are getting away with it, and you hear some student tell you that they have undergone the same procedure, and they have succeed in it and they tell you quite bravely, honestly with pride, then you'll think they did it, and why can't I do it, so I guess there's this tradition." (Document 1, 524–535)

The evidence suggests that the issue of institutional culture in academic dishonesty was widespread over the four year course. Some students viewed the culture as a reflection of the greater society, manifesting the social norm. As a first year student said:

"It's something that's there and you can't get rid of it. Because of the generation behaviour, we want to get fast results, the easiest way. With that pressure in our mind, we will do things that make us get good results without working so hard for it, so it's going to be always there, and you can't get rid of it; it's something that will always be there." (Document 4, 262–274)

The transcripts suggest one motivation behind cheating could be close competition within the academic environment. Once students detected the widespread incidence of dishonest behaviour,

they would commonly develop an, "It's wrong, but everyone does it" attitude. They perceived that if they did not commit to dishonest behaviour, they would be at a disadvantage to other students.

"Everybody is doing it, so fine, I'll do it." (Document 4, 83–84)

"Everybody seems to do, be doing it. Why should I waste my time and actually sit in the library and do it when every body else is copying?" (Document 8, 413–417)

## Study Skills

Poor study skills, including learning inertia, poor time management and insufficient academic support, were recurring themes as factors leading to academic dishonesty.

Nearly every student interviewed mentioned laziness as a factor driving dishonest behaviour. Many students wanted to get good grades with minimal effort. They viewed cheating as the quick and easy path to completing the learning task given to them.

"Why would I copy? [repeating the question] Em, Just because I've been feeling lazy, don't want to work, you know," (Document 8, 132–135)

"To get a good grade, basically and then to know that they are doing something without putting in too much effort." (Document 4, 69–75)

In addition, time was also commonly mentioned as motivating dishonesty. First year students were focused on the issue of poor time management. In contrast, the fourth year students were more concerned with saving time. For many first year students, more freedom and activities, both academic and social, were available to them than ever before.

"...time factors... you go out to a party and you haven't done any work, and you find out you have a deadline the next day. And the fastest way is to cheat." (Document 4, 114–119)

Better time management skills could give first years a better a sense of control over their lives and reduce the pressure to cheat.

Although a few fourth year students did discuss time management, generally they talked more about the matter of saving time. They perceived dishonest behaviour as a means of saving time by making the learning task easier.

The impression that cheating is routine was observed in some interviewees.

"You know, if I don't have enough time to do some work, I would sit down and get some of the answer from the coursework, and basically be copying it out, like the calculation and stuff" (Document 8, 123–129)

A number of the fourth year students also believed there was more time available to study in the fourth year than in other years and this helped them

manage their work better. They felt the earlier years of the course were more structured compared to the fourth year.

"Whereas in a lower year, everything in place is structured, and more often it's the same thing as the year previous to that, and the year previous to that." (Document 11, 361–367)

Several students interviewed also felt that there was insufficient support from the university, which could raise the incidence of dishonest behaviour.

"I think some of the student tutors have some responsibility maybe to...I think they should be more involved with the students and find out what's going on in their life." (Document 10, 256–263)

Many interview transcripts showed that students were using the work they obtained from the year above as a basis for their own work. It was more observable in fourth year students; over the four years they seem to have developed certain habits.

"We now just use it as a guideline, you know, what you are suppose to do and you can do it yourself. In first year, I just copied like one sheet to another." (Document 8, 377–382)

In contrast, first year students often felt that there was inadequate information given to them for their assignments and to complete the learning task. They also wanted the university to give a more concise description of the meaning and penalties for engaging in academic dishonesty.

"I think if they think that sort of thing is cheating in coursework, then they would make people more aware of it. I don't think people in first year think it is cheating." (Document 6, 315–322)

The differences observed between first and fourth year students could again be due to the fact that first year students are new to the academic environment, but fourth year students have been accustomed to it for a longer time.

### Assessment

The assessments employed to evaluate the performance of students can have an effect on the prevalence of academic dishonest behaviours among the pharmacy students. There was a general trend that the more important an assessment is, the more likely a student would consider engaging in dishonest behaviours to achieve better marks. This trend was more pronounced in fourth year students; they talked more about the percentage of the final degree that an assessment might carry, which is seen less in first year students.

"I am just a first year, I just need to pass to second year and from second year to third year. So, people in the upper don't really see it as a cheating factor. By the way that doesn't contribute to the degree." (Document 11, 319–326)

Students commonly perceived that cheating in coursework was less serious than in exams. They perceived "collaboration" in coursework as an

important learning process associated with the need to research information for learning.

"But coursework, because it could be a good thing working together, it's not that serious, but then I think it's equal to cheating. But, the examination is more serious." (Document 5, 42–46)

"Again, I think it depends on the coursework, you know the level of mark awarded for that piece of coursework, as to rather it's cheating or not. Because everyone helps everyone in coursework, and it's quite a group work kind of thing." (Document 6, 59–66)

Furthermore, the ranking was sometimes given according to the perceived importance of the learning task and the contribution toward the final degree, as seen in (Document 6, 59–66) above.

According to the interview transcripts, students were achievement-motivated and all students interviewed identified their desire to achieve. Students were studying less for the purpose of learning and development than for the purpose of achieving a good mark.

"Well it's based on the same thing, everybody wants to do well, everybody wants to pass, nobody likes failing, so it's like a factor, you would do anything to gain an advantage and some people think that they would do anything to gain advantage, passionate to win, like to pass the exam, that's a feel good factor. So if they think they are not capable of achieving it by their own knowledge, then they'll use other, you know, or trick to achieve the same kind of passing, it's the same thing. Everybody wants to pass, everybody wants to do well, that's life." (Document 11, 91–111)

To conclude, most of the students interviewed were achievement-motivated. The more important they perceived the assessment, the greater their desire to do well and tendency to cheat. They generally have a poor understanding of the purpose of the learning task set for them and tend to rank coursework and exams in accordance to their contribution toward the module or the final degree.

### Personal Qualities

Personal qualities were another theme that often occurred in the transcripts. Students from both of the years believed that the nature of the individual was a factor when engaging in dishonest behaviour. Several personal qualities could play an important role in the incidence of dishonest behaviours.

"It really depends on the individual; depends how they are taught by their parents. They will do it no matter what, even they get into trouble; they'll still do it." (Document 5, 293–297)

There were individual differences amongst the students; the way that the students were brought up, the cultural differences and the personality differences affected their perception of academic dishonesty. Additionally, students perceived that students from a particular ethnic background had a higher incidence of dishonest behaviours.

"Yeah I think there's a lot of handing down of work from year to year, especially among the [...] students." (Document 12, 183–186)

"Um, I have heard that there's a lot of that going on with the ... contingent because everyone knows each other, and it's very easy for that to happen." (Document 6, 186–192)

Students who have English as their second language discussed that they engaged in dishonest behaviours like "cut and paste" because pre-written sentences were already fluent and had correct grammar. They experienced difficulties using English to express themselves and, in general, also had learning inertia.

"For the overseas student, their English is not very well, they just copy the sentence because the grammar is quite well and you don't need to write it yourself." (Document 2, 139–144)

Students were generally achievement oriented, had the desire to achieve success and "to meet the inner standard". Pressure to do well and to meet their "inner standard" in order to achieve is often generated from the students themselves.

"The motivation is that they want to see their results, they want to pass every year, they want to be able to qualify and have a successful job, a good degree at the end of it." (Document 11, 118–123)

Fear of failure was also seen among the students in both years and the transcripts suggested it was linked to several factors mentioned earlier, like the achievement-oriented behaviour.

"So the consequence of failure is too big and that is a motivation itself. Nobody likes to fail, it's not a good feeling." (Document 11, 129–133)

The fear of failure could also be due to external pressures, like financial pressure and family pressure.

"Motivation could be peer pressure, it could be community pressure, especially someone expecting you to do really well, like it can be parents it can be money. Knowing that you fail, you have to pay again that will be it." (Document 5, 77–84)

Peer pressure was also an important contributing factor. For the first year students, they considered that the length of the course meant there was a need to establish good relationships with their peers. They also valued their new friends.

"Especially when you are first year, and you just make new friends and you just can't afford to lose that friend or friends, you subsequently want to um, show them you're their friend, and you're their companion, helper and you'll be lenient in you marking." (Document 1, 292–300)

In addition, students did not want to appear as incompetent in their peer group.

"You don't want to look like the one that's the dumb one. So, you would rather make it up. According to students, they make it up and fit in with every body because many students do it." (Document 1, 439–445)

Students wanted to raise their social acceptance and to become more popular. They did not want to have a reputation that they are harsh and unfriendly and wanted to have a good relationship with their peers. Also, they believed that if they helped their colleague, their colleague might help them later on in their course.

"Friendship is a motivation. Favours are another motivation, you want to do a favour back. To be liked generally another motivation, you want people to like you, so that's another motivation. Every time you do it for them, you are more popular, people like you and people want to be with you. You feel better about yourself." (Document 4, 191–201)

There is also an enormous desire to fit in with other students, which in some individuals could override their integrity.

"Yes, it's a friendship thing because they are your peers, so, um, you don't want to lose their respect. So, um, their respect is more important to you than the results they get." (Document 7, 197–203)

### Course Specific Factors

Students often engaged in dishonest behaviours to cope with the stress from the course.

"I think if you have to do the amount of work that the pharmacy department expect you to do, you will never have a life, you never go anywhere." (Document 7, 384–388)

Although all students talked about the stress from the pharmacy course, there were differences in the descriptions from the first year and fourth students. The pressures and stress of first year students tended to be the pressure that came from adapting to the new academic environment and system.

"Many people are stressing about this stupid thing of handing in, handing in [assignments]." (Document 5, 385–387)

In contrast the fourth year students talked more about the stress that came from the academic system. They had been in the system for three years longer than the first year students and their accounts reflect the stress that comes from the academic system itself and the way assessments are conducted.

"Especially in titration, if you missed by a fraction of a ml, it costs you a grade, that's got to be right for the money." (Document 7, 247–250)

"It's the pressure to pass all the modules. For example, I know I could fail a certain thing, and the system in place encourages you to cheat." (Document 6, 287–292)

In addition to this, the end of year exams leads to overwhelming stress for some students, and the only way that they could cope was by cheating.

"If you got many exams, say six, in a short period of time, um, you can't learn everything." (Document 7, 70–73)

Therefore, engaging in dishonest behaviour could be a method to cope with the stress from the course.

## Summary and General Discussion

Motivation is defined as “a series of stages that are continually gone through; each series begins with a stimulus perhaps a bodily need or an external cue in the environment.” (Morris, 1982) As Fig. 2 shows, the process of motivation is activated by a stimulus, which leads to behaviour. If the behaviour results in the attainment of the goal, the motive is satisfied and the chain is complete. This process could be varying in different individuals and could take place in a conscious or unconscious state of mind.

The motives behind the engagement of academic dishonest behaviours can be summarized as three main factors; the external factors, internal factors and social pressure.

The internal factors are factors that are due to the individual themselves, these include learning inertia, poor study skills, the nature of the individual, ethnic background, fear of failure, lack of confidence, achievement motivated behaviour and personal pressure and stress.

Social pressures include the need to gain social acceptance, to fit in with the peer group, to stay competitive and to maintain their self-esteem.

Finally, the external factors are those due to the institutional environment and the current system. These factors include the uncertainties about the definition of dishonest behaviours and their punishment, insufficient support from the university and the school of pharmacy, opportunities that are present in the system, the nature of the learning task and institutional culture.

In this study, the two year groups chosen gave a broad spectrum of views on academic dishonesty as they are at the two extremes of the cohort years within the course. As the results show, there are several factors, which are more prevalent in one year than the other.

The first year students interviewed were found to be uncertain about the definition of academic dishonesty and the subsequent punishments. Consequently, they were more worried about passive cheating when compared to the fourth year students. They also criticized that there was not enough support from the university.

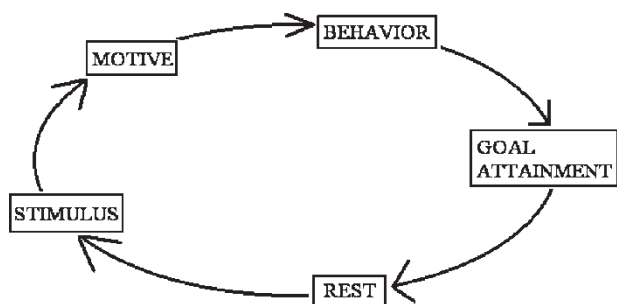


FIGURE 2 The motivation process.

The fourth year students interviewed were found to be more sophisticated in their thinking about academic dishonesty than the first year students. They had been in the academic system for longer; as the results show, they knew the opportunities within the system and generally believed engaging in dishonest behaviour was part of an institutional culture. According to the current grading system, third and the fourth year results contribute toward a student's final degree, and the fourth year students are shown to have higher pressure and stress from the course. The pressure to do well, fear of failure, and the importance of the assessment were more commonly mentioned by the fourth year students. Engaging in dishonest behaviours could be a “coping mechanism” to deal with these stresses and frustrations.

All the students interviewed stated that engaging in dishonest behaviour could be due to peer pressure. Engaging in dishonesty behaviours could be a way to increase their social acceptance.

## Assumptions and Limitations

In this study, several assumptions were made. In particular, in responding to the interview questions, the participants were assumed to be truthful and honest. The incidence of dishonest behaviours may be under reported, particularly in first year students as they still had three more years at university, as students could be worried about the affect of the interview on their degree, although it was stressed that the interview was anonymous and confidential.

## CONCLUSION

In a previous study, academic dishonesty was found to be widespread among pharmacy students and students from other disciplines. Following the twelve semi-structured interviews among first and fourth year students, this investigation has identified five principle themes relating to the possible reasons why students engage in dishonest behaviours. These included, institutional environment, study skills, assessment employed, personal qualities and course specific factors.

This study has highlighted several areas where improvement can be made towards decreasing the incidence of academic dishonesty. Firstly, the institution should provide clear guidance to the student body about what constitutes academic dishonesty and its consequences. This information should be readily accessible to students. Academic honour codes could be introduced as they place responsibility on the students themselves for governing and judging the issues of academic dishonesty. Part of the induction to university life



should also include some support relating to study skills and time management, as many new students find the balance between social and academic life difficult to manage. Academic staff may be able to reduce certain types of academic dishonesty by reviewing and changing the assessment processes used, as students see them as opportunities to engage in dishonesty. In addition, an increase in academic guidance and the explanations and implications of learning tasks may also help to reduce the incidence of academic dishonesty. Regarding the low detection rate, an increase in communication between academic staff such as having a staff discussion forum or a discussion board and regular school meetings, could aid in reducing dishonesty.

These issues are particularly important for pharmacy students as they are entering a profession with high standards of personal and professional conduct. Academic dishonesty is of concern to all academic disciplines, but the nature of pharmacy as a profession makes it a particularly salient issue in pharmacy education.

## References

- Aggarwal, R., Bates, I., Davies, J.G. and Khan, I. (2002) "A study of academic dishonesty among student at two pharmacy schools", *The Pharmaceutical Journal* **269**, 529–533.
- Anderman, E.M., Griesinger, T. and Westerfield, G. (1998) "Motivation and cheating during early adolescence", *Journal of Educational Psychology* **90**(1), 84–93.
- Ashworth, P., Bannister, P. and Thorne, P. with student on the Qualitative Research Methods Course Unit (1997) "Guilty in whose eyes? University students' perceptions of cheating and plagiarism in academic work and assessment", *Studies in Higher Education* **22**(2), 187–203.
- Bjorklund, M. and Wenestam, C.G. (1999) Academic cheating: frequency, methods and causes. The European Conference on Educational Research, Lahti, Finland 22–25 (From Education-Line).
- Brown, B. and Emmett, D. (2001) "Explaining variations in the level of academic dishonesty in studies of college students; some new evidence", *College Student Journal*, 529–537.
- Caruana, A., Ramaseshan, B. and Ewing, M.E. (2000) "The effect of anomie on academic dishonesty among university students", *The International Journal of Educational Management* **14**(1), 23–30.
- DeVoss, D. and Rosati, A.C. (2002) "It wasn't me, was it? Plagiarism and the web", *Computers and Composition* **19**, 191–203.
- Evans, E.D. and Craig, D. (1990) "Teacher and student perceptions of academic cheating in middle and senior high schools", *Journal of Educational Research* **84**(1), 44–52.
- Franklyn-Stokes, A. and Newstead, S.E. (1995) "Undergraduate cheating: who does what and why", *Studies in Higher Education* **20**(2), 159–172.
- Hetherington, E.M. and Feldman, S.E. (1964) "College cheating as a function of subject and situational variables", *Journal of Educational Psychology* **55**(4), 212–218.
- McCabe, D.L. and Trevino, L.K. (1996) "What we know about cheating in college", *Change* **28**(1), 28–33.
- Morris, C.G. (1982) *Psychology: An Introduction*, 4th Ed. (Prentice Hall, Englewood Cliffs), p 280.
- Murdoch, T.B., Hale, N.M. and Weber, M.J. (2001) "Predictors of cheating among early adolescents: academic and social motivations", *Contemporary Educational Psychology* **26**, 96–115.
- Newstead, S.E., Franklyn-Stokes, A. and Armstead, P. (1996) "Individual differences in student cheating", *Journal of Educational Psychology* **88**, 229–241.
- Nonis, S. and Swift, C.O. (2001) "An examination of the relationship between academic dishonesty and workplace dishonesty: a multicampus investigation", *Journal of Education for business* **77.2**, 69–77.
- Norton, L.S., Tilley, A.J., Newstead, S.E. and Franklyn-Stokes, A. (2001) "The pressures of assessment in undergraduate courses and their effect on student behaviours", *Assessment and Evaluation in Higher Education* **26**(3), 269–284.
- Roig, M. and DeTommaso, L. (1995) "Are college cheating and plagiarism related to academic procrastination", *Psychological Reports* **77**, 691–698.
- Singhal, A.C. (1982) "Factors in students' dishonesty", *Psychological Reports* **51**, 775–780.
- Storch, E.A. and Storch, J.B. (2002) "Fraternities, sororities, and academic dishonesty", *College Student Journal* **3**, 247–251.
- Thorpe, M.F., Pittenger, D.J. and Reed, B.D. (1999) "Cheating the researcher: a study of relation between personality measures and self-reported cheating (statistical data included)", *College Student Journal* **33**(1), 49, see also, 1–10.