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## Perceptions and Attitudes of Students about Academic Integrity Policies at an Omani University

*Do healthcare students differ from others?*

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### Abstract

**Objectives:** This study investigates Omani university students' perceptions of and attitudes towards academic integrity policies. A comparison between healthcare (Nursing and Medicine) and non-healthcare students was conducted. **Methods:** A cross-sectional study design was used where students were asked to complete an anonymous questionnaire. Data were collected from nine colleges at Sultan Qaboos University and were analysed. **Results:** A total of 579 students completed the questionnaire. The results revealed that healthcare students have a significantly higher perception of and better attitudes towards academic integrity policies compared to their non-healthcare counterparts. **Conclusion:** The results of this study should motivate faculty to foster a better understanding and implementation of the honour code to encourage an environment of academic integrity.

**Keywords:** Academic; attitude; Code; Ethics; Integrity; Oman; Students; University.

### **Advances in Knowledge**

- This study shows that healthcare students (Nursing and Medicine) have a higher perception of and better attitudes towards academic integrity.
- A higher perception of and better attitudes towards academic integrity is believed to be correlated with lower academic dishonesty behaviours such as cheating.
- We discuss that this result could be due to the fact that the honour code is brought to the attention of students at the healthcare colleges more frequently.
- Therefore, we recommend all universities include the honour code and academic integrity within their curricula and consistently remind students about its importance in academic life.

### **Application to Patient Care**

- Healthcare professionals are guided by professional standards and codes of ethics in which integrity, honesty, and trustworthiness are essential to the healthcare-patient relationship.
- Violating academic integrity at the university level may later affect patient care and contribute to unethical clinical practice.
- Therefore, it is paramount to find ways to increase academic integrity at the university level in order to positively affect patient care.

### **Introduction**

Academic integrity is defined as the adherence to five fundamental values: honesty, trust, fairness, respect, and responsibility.<sup>1</sup> Most universities around the world are committed to academic integrity and ethical standards and invest in creating policies and codes of honour to direct student behavior.<sup>2</sup> Yet, incidents of academic dishonesty are the rise and becoming a matter of increasing concern.<sup>3</sup> One of the greatest challenges many universities face is upholding academic integrity and limiting unethical behaviours, dishonesty, and misconduct.<sup>4</sup> Studies have suggested that students who are involved in academic dishonesty at the undergraduate level are likely to participate in dishonest behaviours in their subsequent work life.<sup>5</sup> This is particularly troublesome among healthcare professionals, who are expected to be sincere and trustworthy. Patients need to be able to trust their caregivers with their health and life.<sup>6</sup>

One of the most effective strategies to combat academic dishonesty is creating policies and codes of honour to nurture a culture of academic integrity.<sup>7</sup> It has been shown that students who engage in cheating behaviours have little knowledge of these policies.<sup>8</sup> On the other hand, students who are involved with, committed to, and satisfied with honour codes tend to uphold academic integrity.<sup>9</sup> Therefore, there is a need to investigate the perceptions of academic integrity policies and the attitudes towards joining a university with an honour code for undergraduate students, especially those in healthcare programs (Nursing and Medicine). There is a dearth of studies about academic integrity policies and students' perceptions of and attitudes towards these policies based on their degree, and fewer still about whether these differ among healthcare students relative to other majors. Moreover, few studies have investigated academic integrity policies in undergraduate students in the Gulf region as a whole, and fewer still in the Sultanate of Oman. This study provides a comparison of the differences in perceptions and attitudes of academic integrity policies among healthcare and non-healthcare students. Healthcare students should have a high level of integrity as they are expected to become healthcare professionals in the future who abide by a high standard of ethical principles. Any dishonest behaviour can be detrimental not only to the healthcare profession but also to patient safety. Therefore, the results of this study may provide important insights to healthcare and non-healthcare educators to enhance the quality of education in order to reach the highest standards.

## **Methods**

This was a cross-sectional study conducted during the 2018–2019 academic year at a public university in Oman, the Sultan Qaboos University (SQU). The approximate student population of the university at the time of data collection was 18,000. A power analysis using the G-power computer program indicated that a total sample of 580 students would be needed to detect moderate effects ( $d=0.3$ ), with 95% power using a t-test between means with alpha at 0.05. Keeping the attrition rate of 10%, the required sample size was 638. University students enrolled in the nine colleges were made aware of our research through emails accessed with the help of the Deanship of Student Affairs. Two research assistants approached the colleges with a list of randomised student names based on the number of students in each of those colleges and inclusion criteria. After explaining the purpose of the study, the voluntary nature of participation, confidentiality,

and anonymity of the information, students were asked to sign the informed consent form and complete the self-reported questionnaire. The response rate was 90%.

The data collection tool was a questionnaire developed by Dr. Donald McCabe of Rutgers University, who administers his survey through the Center for Academic Integrity (<http://www.academicintegrity.org/index.php>). The questionnaire attempts to measure university students' perceptions of and attitudes towards the academic integrity policies of the institution and their understanding and support of policies against cheating. Perceived understanding/acceptance of the university's academic integrity policies (6 items) was measured using 5-point Likert scales, with values ranging from 1 (very low) to 5 (very high). Thus, the perceived understanding/acceptance variable ranged from 6 (low) to 30 (high). Students' attitudes were assessed with two questions on the awareness of the presence of an honour code at the university and whether the presence of an honour code affected their decision to enrol at SQU. The Cronbach's alpha for this scale was 0.797 for the American population.<sup>10</sup>

Statistical package for social sciences version 22 (SPSS 22) was used for data analysis after the investigators entered and audited the data. Data were analysed using descriptive (frequency and percent) and inferential statistics (chi-square). Statistical significance was assessed at the  $p < 0.05$  level.

The ethics committee of the College of Nursing and the ethics committee of SQU provided the authors with permission to conduct the study. Participants were informed that their participation was voluntary and that they could withdraw at any time. Written informed consent was provided by participants before they began the survey questionnaire. To ensure participants' anonymity, only code numbers were used for identification.

## **Results**

### *Demographic information of university students*

A total of 579 students responded to the survey on academic integrity. The results were analysed, and the healthcare colleges (2 colleges: Medicine and Nursing) were compared with the non-

healthcare colleges (7 colleges: Engineering, Agriculture, Education, Arts, Science, Law, and Economics) at the university.

The majority of participants were from non-healthcare colleges—395 (68.2%) compared to 184 (31.8%) from healthcare colleges. Most respondents were in the third and fourth years of their programs in both groups (n=225; 56.9%) in non-healthcare colleges and (n=126; 68.8%) in healthcare colleges). The majority of participants were male (n=199; 51%) in non-healthcare colleges and female (n=117; 64%) in healthcare colleges. The mean age was  $20.94 \pm 1.36$  among non-healthcare students and  $21.18 \pm 2.34$  among healthcare students.

#### Perceptions of students about academic integrity environment

There were six aspects analysed for the perception of the academic integrity environment at the university. Students from the healthcare colleges had a higher level of understanding than those of non-healthcare colleges with the total mean scores of  $18.87 \pm 3.52$  and  $17.96 \pm 3.44$  respectively,  $t(569) = -2.873$ ,  $p = 0.004$ , as depicted in [Table 1].

#### *Attitudes towards the academic integrity environment*

When asked about their awareness of the honour code at the university before applying to SQU, healthcare college students (n=91, 49.7%) were more aware than non-healthcare college students (n=153, 39.0%) ( $p = 0.015$ ). This awareness was more likely to affect the decision of healthcare college students to join the university (n=108; 59.6%) than non-healthcare students (n=190; 48.2%) ( $p = 0.012$ ).

Moreover, we analysed students' attitudes after dividing the study population based on gender. Our results showed that female students from the healthcare colleges (n=65; 35.5%) were more aware of the honour code than male students (n=26; 14.2%) ( $p = 0.018$ ). On the other hand, the fact that SQU has an honour code affected the decision of female students from non-healthcare colleges (n=105, 26.6%) to attend the university more than male students (n=85; 21.6%) ( $p = 0.034$ ) [Table 2].

### *Internal consistency of the questionnaire*

In our study population, Cronbach's alpha coefficient of the scale was 0.644.

### **Discussion**

Our results indicate that healthcare students have a higher perception of and a better attitude towards academic integrity policies than non-healthcare students. A study by McCabe, Treviño, and Butterfield<sup>11</sup> found that students at universities with an honour code better understand and support academic integrity policies, severity of academic dishonesty, and effectiveness of penalties compared to universities without an honour code.

Considering that SQU has an honour code, the discrepancy in students' perceptions of the academic integrity policy between healthcare colleges and non-healthcare colleges could result from the honour code being brought to the attention of students at the healthcare colleges more frequently. Tatum and Schwartz<sup>12</sup> have suggested that for an honour code to work properly, universities need to not only create one but also discuss it with and emphasise its importance to students. The code of honour at SQU is publicly available on the university's website as a Student Academic Misconduct Policy in which the university pledges to ensure high standards of academic integrity.<sup>13</sup> The College of Nursing at SQU, for instance, publishes the code of honour along with the consequences of dishonest behaviours in the student academic handbook, which is distributed to students every semester. To the best of our knowledge, none of the non-healthcare colleges at SQU publish the code of honour in their student academic handbook at the time of this study. Nursing and Medical students also watch their peers pledge to uphold the honour code every year at a large graduation ceremony, when graduating, students take an oath as they receive their degrees. Awareness that this will occur may enhance their perception of and attitudes towards academic honesty policies. Such understanding and approval of the university policies have been found to correlate with higher academic integrity.<sup>14</sup> Indeed, Vandehey, Diekhoff, and LaBeff<sup>15</sup> have found that students who endorse the honour code and do not cheat tend to act with significantly stronger integrity than those who cheat. Reminding students of such policies is thought to contribute to lower rates of academic dishonesty.<sup>15</sup> Therefore, we recommend all colleges at SQU include the honour code and academic integrity in their curricula and constantly remind students of its importance throughout the semester.

Gender differences could be another reason for this discrepancy in the perceptions and attitudes of SQU students. It has been shown that women abide by the rules and are more sensitive to penalties than men.<sup>16</sup> More importantly, instructions about ethics are more impactful on women than men.<sup>16</sup> The majority female population of students in the healthcare colleges may have affected the results of this study, leading to the conclusion that healthcare students have higher perceptions of and better attitudes towards academic integrity policies. It is worth noting that researchers believe that teaching about the importance of ethical behaviour at the undergraduate level has a greater effect on men who can improve their honest behaviour to reach an equivalent level of females.<sup>17</sup>

The current study has some limitations: One is the relatively small size of the healthcare students group compared to the non-healthcare. Therefore, the findings should be replicated in further student cohorts. The fact that we obtained statistically significant results with our sample size suggests that it is adequate; however, the samples are from only one institution, which makes it difficult to generalise the results. The cross-sectional research design is also a possible limitation that could limit the ability to establish causal associations. Moreover, since it is difficult to obtain an objective measure of academic integrity, another limitation is the self-reported nature of this study.

## **Conclusion**

Our results indicate that healthcare students have higher perceptions of academic integrity and better attitudes towards having an honour code when compared to students from non-healthcare colleges. Studies have shown that students should have a clear understanding of the policies, which will allow them to distinguish what constitutes unethical behavior.<sup>18</sup> Therefore; education is paramount to enhancing students' knowledge about the honour code and academic integrity, which will promote their perceptions and attitudes about academic integrity and hopefully decrease incidents of dishonest behaviour.

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**Table 1:** Comparison of students' perceptions of the academic integrity environment at the university

Academic Environment	Colleges	N	Mean	Std. Deviation	t	df	P value
<b>Total academic environment</b>							
1. The severity of penalties for cheating at Sultan Qaboos University	Non-healthcare colleges	393	17.96	3.445	-2.873	569	.004
2. The average student understands of campus policies concerning student cheating	Healthcare colleges	178	18.87	3.528			
3. The faculty understands of these policies							
4. Students support of these policies							

5. Faculty support of these policies							
6. The effectiveness of these policies							

**Table 2:** Comparison of students' attitude towards academic integrity

Questions		Categories	Female n (%)	Male n (%)	Total n (%)	Chi square value	P value
<b>Non-healthcare colleges</b>	Before you came to SQU, were you aware that the school had an honour code?	Yes	82 (20.9)	71 (18.1)	153 (39.0)	1.488	0.255
		No	113 (28.8)	126 (32.1)	239 (61.0)		
	Total		195 (49.7)	197 (50.3)	392 (100)		
<b>Healthcare colleges</b>	Before you came to SQU, were you aware that the school had an honour code?	Yes	65 (35.5)	26 (14.2)	91 (49.7)	5.043	0.018
		No	51 (27.9)	41 (22.4)	92 (50.3)		
	Total		116 (63.4)	67 (36.6)	183 (100)		
<b>Non-healthcare colleges</b>	Did the fact that SQU has an honour code impact your decision to attend?	Yes	105 (26.6)	85 (21.6)	190 (48.2)	4.889	0.034
		No	90 (22.9)	114 (28.9)	204 (51.8)		
	Total		195 (49.5)	199 (50.5)	394 (100)		

<b>Healthcare colleges</b>	Did the fact that SQU has an honour code impact your decision to attend?	Yes	75 (41.4)	33 (18.2)	108 (59.6)	3.338	0.083
		No	41 (22.7)	32 (17.7)	73 (40.4)		
	Total		116 (64.1)	65 (35.9)	181 (100)		

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