

# Questionable Work Practices

## The Views of Postgraduate Students in IT Courses (Part 2)

Judy Sheard, Martin Dick, Selby Markham

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### Introduction

This is Part 2 of a report on a study that aims to determine attitudes towards questionable work practices of postgraduate and graduate diploma students within the School of Computer Science and Software Engineering (CSSE).

More details of the study and the research method used may be found in Part 1 of this report at <http://cerg.csse.monash.edu.au/reports/TechReports.html>

### **Determining underlying variable structures of acceptability of questionable work practices, cheating reasons and cheating prevention responses**

Factor analyses were performed on the acceptability of questionable work practice responses, the cheating reasons and cheating prevention responses in an attempt to find any underlying latent variable structures within these variable grouping.

### **Questionable work practice scenarios**

The ratings of acceptability of the scenarios variables were analysed using a factor analysis. This is a method used to determine a latent variable structure that can account for intercorrelations of an observed set of variables. The factor analysis method performed used a Principal Axis Factoring extraction and a Varimax rotation with Kaiser normalization.

Examination of the variable loadings within the rotated factor matrix, using a minimum variable loading of |0.4|, indicate interpretable results for each factor. Using this criteria, all scenarios show a clear loading on one factor except for scenario 8 and this has been included in two factor structures. The variable loadings are shown in Table 1 and the scenarios within each factor structure are shown in Table 2.

Scenario	Factor				
	1	2	3	4	5
1	.144	.146	<b>.429</b>	.318	.182
2	.013	.031	<b>.804</b>	-.091	.155
3	-.086	-.029	<b>.614</b>	-.023	.144
4	.205	.137	<b>.498</b>	.205	.041
5	.218	.175	.263	.052	<b>.807</b>
6	<b>.673</b>	.082	.238	.293	.120
7	<b>.801</b>	.225	.023	-.014	.226
8	<b>.508</b>	.217	.083	.192	<b>.406</b>
9	.090	.180	.183	<b>.531</b>	-.054
10	<b>.479</b>	.019	-.097	.134	-.011
11	.276	.217	-.081	<b>.618</b>	.346
12	.053	.122	.284	.189	<b>.466</b>
13	<b>.458</b>	.342	.156	.111	.058
14	.242	<b>.754</b>	.029	.089	.078
15	.036	<b>.718</b>	.049	.177	.115
16	.127	<b>.441</b>	.082	.273	.174
17	.377	.291	.039	<b>.669</b>	.387
18	.395	<b>.457</b>	.220	.330	.196

**Table 1 Rotated Factor Matrix (rotation converged in 6 iterations)**

Factor	Description	Scenarios
1	Assignment plagiarism	6, 7, 8, 10, 13
2	Exam cheating, fraud, plagiarism	14, 15, 16, 18
3	Assignment help, recycling	1, 2, 3, 4
4	Inaction to correct error, plagiarism (copying from a book or Website)	9, 11, 17
5	Using another assignment as a basis	5, 8, 12

**Table 2 Factors underlying student ratings of acceptability of scenarios**

### Reasons for cheating

The ratings of the likelihood of each reason causing cheating were analysed using a factor analysis. The factor analysis method performed used a Principal Axis Factoring extraction and a Varimax rotation with Kaiser normalization.

The factor analysis yielded four factors with eigenvalues greater than 1.0. Examination of the variable loadings within the rotated factor matrix indicate interpretable results for each factor. One variable (q22h, q22i, q22l and q22m) were salient within more than one factor and have been included in more than one factor structure. The variable loadings are shown in Table 3 and the reasons for cheating within each factor structure are shown in Table 4.

Reason		Factor			
		1	2	3	4
q22a	Not enough time	.686	.198	.279	.327
q22b	Too great a workload at university	.780	.153	.222	.273
q22c	Will fail otherwise	.737	.234	.031	.177
q22d	Lazy	.181	.229	.068	.783
q22e	Everyone does it	.099	.498	.309	.311
q22f	Need to get better marks	.385	.658	.309	.180
q22g	Parental pressure	.255	.497	.197	.373
q22h	Can't afford to fail	.623	.583	.124	.014
q22i	Assignments are too hard	.502	.134	.424	.527
q22j	To help a friend	.127	.173	.656	.047
q22k	Missed classes due to ill health	.138	.116	.776	.124
q22l	Exams for the subject are too hard	.568	.208	.422	.364
q22m	Afraid of failing	.722	.478	.111	-.074
q22n	For a monetary or other reward	.171	.584	.050	.113

Table 3 Rotated Factor Matrix (rotation converged in 11 iterations)

Factor	Description	Reasons
1	Workload pressure, concern about failure	22a, 22b, 22c, 22h, 22i, 22l, 22m
2	Need to pass or get better marks, external pressure	22e, 22f, 22g, 22h, 22m, 22n
3	Circumstances beyond control/altruism	22i, 22j, 22k, 22l
4	Finding work hard	22d, 22i

Table 4 Factors underlying students' ratings of reasons for cheating

### Reasons for not cheating

The ratings of the likelihood of each reason preventing cheating were analysed using a factor analysis. The factor analysis method performed used a Principal Axis Factoring extraction and a Varimax rotation with Kaiser normalization.

The factor analysis yielded three factors with eigenvalues greater than 1.0. Examination of the variable loadings within the rotated factor matrix produced indicate interpretable results for each

factor. The variable loadings are shown in Table 5 and the reasons within each factor structure are shown in Table 6.

Reason		Factor		
		1	2	3
q23a	Want to know what your work is worth	.772	.255	.116
q23b	Pride in your work	.671	.023	.010
q23c	Can get good marks without cheating	.602	.176	.101
q23d	Against your moral values	.442	.254	.270
q23e	Against your religious beliefs	.121	.320	.136
q23f	Fear of being found out	.178	.684	.163
q23g	Never thought about it	.196	.104	.903
q23h	Don't know how to	.036	.270	.585
q23i	Fairness to other students	.275	.437	.129
q23j	Penalties if caught are too high	.052	.822	.088

**Table 5 Rotated Factor Matrix (rotation converged in 5 iterations)**

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Factor	Description	Reasons
1	Self worth, pride, moral values	23a, 23b, 23c, 22d
2	Fear, fairness	23f, 23i, 23j
3	Never considered	23g, 23h

**Table 6 Factors underlying students' ratings of reasons preventing cheating**