

# Organisational citizenship behaviour within learning environments

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DOI:10.3794/ijme.71.219

Received: July 2007

Revised: February 2008

Accepted: March 2008

## Abstract

Extra-role behaviours, collectively known as organisational citizenship behaviours (OCBs), have recently been a subject of many research inquiries within business and organisation research. Even though many institutions incorporate this work-related behaviour into their curricula as an important topic for students to learn, inquiry into the extent to which students practice this behaviour is limited.

Based on a survey of third year business students of the National University of Lesotho, the purpose of this study was to explore the influence of students' self-esteem and commitment to their institution on OCB, and the impact of OCB on their academic achievement.

Data were analysed by means of descriptive statistics and correlation analysis. Self-esteem and commitment were positively and significantly related to OCB, but only one dimension of OCB, namely, altruism or helping behaviour, was related to academic performance of students before and after the study.

The results of this exploratory study suggest that extra-role behaviours such as OCB are somewhat practiced within learning environments, and can influence academic achievement of students.

*Keywords:* academic performance; commitment; organisational citizenship behaviour; self-esteem

## Introduction

Some three decades ago, Katz and Kahn (1978) argued that for an organisation to function effectively, among other things, it must have people who undertake innovative and spontaneous activities that go beyond prescribed role or job requirements (Skarlicki and Latham, 1997). These activities have been collectively described as organisational citizenship behaviours (Organ and Ryan, 1995). Organisational citizenship behaviour (hereafter OCB) has recently been a subject of many research inquiries within business research. Although the importance of extra-role behaviour has been known for some time, Organ and colleagues (Bateman and Organ, 1983; Smith *et al.*, 1983; Organ, 1988) are often credited with coining the term OCB (Podsakoff *et al.*, 2000; Coyle-Shapiro *et al.*, 2004). While OCB is regarded as the voluntary behaviour that extends beyond the normal call of duty, in-role behaviour is described as the required behaviour that forms part of one's duties and responsibilities (Allison *et al.*, 2001). According to Organ (1988: 4), OCB is the "behaviour that is discretionary, not directly or explicitly recognised by the formal reward system, and that in aggregate promotes the effective functioning of the organisation".

Within the work setting, many antecedents of OCB have been cited including job-satisfaction (Bateman and Organ, 1983), perceived organisational support (Coyle-Shapiro and Kessler, 2002), procedural justice (Wayne *et al.*, 1997; Coyle-Shapiro *et al.*, 2004), interactional justice (Moorman, 1991), organisational identification (Christ *et al.*, 2003) and organisational commitment (Organ and Ryan, 1995; Podsakoff *et al.*, 2000). OCB has also been found to correlate positively with different forms of organisational effectiveness (Podsakoff *et al.*, 2000), performance ratings and reward allocation decisions of supervisors (Allen and Rush, 1998), and evaluations of salespersons (MacKenzie *et al.*, 1993).

Even though many institutions of higher education incorporate OCB into their curricula as an important topic for students to learn, research on the extent to which students practice this behaviour is limited. Allison *et al.* (2001) lament this paucity of research because OCB is important for the career success of students. The scarcity of research is especially surprising given that the primary aim of institutions of higher education is to equip learners with skills they need in their future careers, and arguably the best way of learning a skill is to practice it.

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Allison *et al.* (2001) established empirically that, within the academic setting, OCB was positively related to reported average cumulative grade point (GPA) and student productivity (measured in credit hours). However, their study could not explore whether antecedents of OCB within the work setting are similar to those within the academic setting. Further, part of learners' performance in the study was self-reported. The current study was designed to fill that gap. Specifically, the study explores the influence of students' self-esteem and commitment to their institution on organisational citizenship behaviour (OCB), and the impact of OCB on objective academic performance. The study contributes to literature in at least two ways. First, it provides an initial exploration into the antecedents of OCB within learning environments. Second, the study relates OCB with objective academic achievement of students. Should it be established that OCB influences performance, it would be plausible for educators to encourage learners to practice OCB in order to improve the academic performance of their institutions. The rest of this paper is organised under five sections. The next section provides the hypotheses of the study. The methodology is then described, after which the results of the study and their discussion are presented. The last section provides the conclusion and prospects for future research.

## Hypotheses

### Organisational Commitment and OCB

Organisational commitment has been described as one's identification, involvement and loyalty to a particular organisation (Mowday *et al.*, 1982). Organisational commitment is undoubtedly a multi-dimensional construct (Meyer and Allen, 1991; Swales, 2002), but this paper adopts an attitudinal definition because attitudinal commitment has been found to have higher predictive validities than calculative commitment (e.g. Mathieu and Zajac, 1990). According to this definition, someone who is committed has the desire to maintain membership of an organisation; values and accepts the goals of the organisation; and is willing to work hard on behalf of the organisation (Guest and Dewe, 1991). It is therefore conceivable that the student who is committed to their institution of learning would identify with such an institution, and would be proud to be a learner in such an institution. Such a student could further encourage their close friends to be learners in the same institution, and they could readily be involved in activities that promote the image of an institution. They would probably also be happy to continue being a student in such an institution.

Organisational commitment and organisational identification have been shown in prior studies to be determinants of OCB (e.g. Organ and Ryan, 1995; Podsakoff *et al.*, 2000; Coyle-Shapiro and Kessler, 2002; Christ *et al.*, 2003).

According to Organ (1988), OCB is a multi-dimensional construct comprising five dimensions, namely: altruism, civic virtue, conscientiousness, courtesy and sportsmanship. Altruism refers to the discretionary helping behaviour towards colleagues, and courtesy is a discretionary behaviour aimed at preventing work-related problems with others. Civic virtue is the behaviour shown when one participates actively in the governance of the organisation, and sportsmanship is one's willingness to tolerate less than ideal circumstances without complaining. Conscientiousness is the willingness to go beyond the call of duty or minimum requirements of the tasks (MacKenzie *et al.*, 1993).

Allison *et al.* (2001) have illustrated the academic setting examples of each dimension of behaviour. A student who shows altruism would be likely to help others with their academic work (e.g. to complete an assignment, or revise for an exam). A student who displays courtesy would notify team members if they could not be present in team meetings or a lecturer if they could not be present in class sessions. A student may show a civic virtue by supporting university related activities, and attending the meetings they are encouraged but not required to attend. A student may show sportsmanship by refraining from complaining about instructor's feedback, and about lack of contribution of other students in team projects. Finally, a student may demonstrate conscientiousness by attending classes on time, by handing assignments in on time, and by participating in class discussions.

As the previous points suggest, a student who is committed to their institution of learning would be likely to identify with the values of the institution, be actively involved in its activities, and hence would be likely to exhibit OCB. Thus based on research from organisational psychology indicating that individuals who feel emotionally attached to their organisations show more citizenship behaviours (Christ *et al.*, 2003), it can be hypothesised that students who report high commitment to their institution would report high OCB, and those who report low commitment would report low OCB.

*Hypothesis 1: Commitment to the university is positively correlated with organisational citizenship behaviour.*

### OCB and Performance

By definition, OCB "...in aggregate promotes the effective functioning of the organisation" (Organ, 1988: 4). Earlier research of OCB was on its determinants, but there have recently been studies on the desirable outcomes of the behaviour (Allison *et al.*, 2001). OCB has been found to correlate positively with different

forms of organisational effectiveness (Podsakoff *et al.*, 2000), performance ratings and reward allocation decisions of supervisors (Allen and Rush, 1998), and evaluations of salespersons (MacKenzie *et al.*, 1993). Within an academic setting, Allison *et al.* (2001) established that OCB was positively related to average cumulative grade point (GPA) and student productivity (measured in credit hours). It can therefore be hypothesised that students who demonstrate higher OCB will have higher academic achievement than those who demonstrate low OCB.

*Hypothesis 2: Organisational citizenship behaviour is positively correlated with academic performance.*

## **Self-Esteem and Academic Performance**

Self-esteem has been regarded as a dispositional factor relating to the evaluative component of the self. It is a person's general evaluation of their own worth, value or importance (Beauregard, 2006). The relationship between self-esteem and academic achievement has been well documented (Pepi *et al.*, 2006), especially among primary level pupils (Yu *et al.*, 2006). It has been argued that "self-esteem and academic achievement are reciprocally related in the sense that better academic performance leads to self-esteem, and higher self-esteem brings about better achievement" (Yu *et al.*, 2006: 334). Since both self-esteem and OCB are positively related to performance, it is plausible to expect that self-esteem is related to OCB. In fact, another related self-concept, namely self-efficacy, was found to relate positively with pro-social organisational behaviour (Lee, 2001). The following two hypotheses can therefore be advanced:

*Hypothesis 3: Self-esteem is positively correlated with organisational citizenship behaviour.*

*Hypothesis 4: Self-esteem is positively correlated with academic performance.*

## **Method**

### **Participants and Procedures**

The paper is based on the survey of the 209 registered third year undergraduate business students of the National University of Lesotho (NUL). The students were asked to complete a self-administered questionnaire at their own pace. The questionnaires were pre-numbered so that they could be matched with students and their academic performance. The students were informed that participation in the study was optional, and confidentiality was guaranteed. Of the 209 questionnaires distributed, 196 usable ones were returned, a usable return rate of 94%. Of the respondent sample, 55.1% were females, and only 5.6% had full-time paid jobs. One (0.5%) student was under 18 years of age; 134 (68.4%) students were in the age group 18 to 24; 56 (28.6%) students were in the age group 25 to 35; and five (2.6%) students were over 35 years of age.

### **Measures**

The items used to measure OCB, general self-esteem and commitment are presented in the Appendix, and they were measured on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Organisational citizenship behaviour: 10 items recommended by Allison *et al.* (2001) to measure OCB within learning environments were used to measure OCB. The items measured all five dimensions of OCB and their wording was modified by the authors from the scales developed by MacKenzie *et al.* (1993). The reliability alpha of the items was 0.72. OCB was also disaggregated into its dimensions, namely, altruism, courtesy, civic virtue, conscientiousness and sportsmanship; and these were respectively correlated with commitment, self-esteem and academic performance. In the Appendix under OCB, items 1 and 2 measure altruism (Cronbach's alpha=0.72); 3 and 4 courtesy (Cronbach's alpha=0.59); 5 and 6 civic virtue (Cronbach's alpha=0.70), 9 and 10 conscientiousness (Cronbach's alpha=0.67) and 7 and 8 sportsmanship (0.50). With the exception of sportsmanship and courtesy, the dimensions reached acceptable levels of internal reliability.

Commitment to the university: Commitment to the university was measured with seven items adapted from the scale developed by Cook and Wall (1980), and one item adapted from the scale of Meyer and Allen (1984). The items were worded in a manner that reflected the learning environment (e.g. I sometimes feel like leaving this university for good). The reliability alpha of the items was 0.86.

General self-esteem: General self-esteem was measured by 10 items developed by Rosenberg (1965). One item, 'I wish I could have more respect for myself', was deleted because its deletion resulted in reliability alpha improving from 0.72 to 0.76.

Academic performance: The 'year mean' is the weighted mean of students' percentage mark, and it is calculated from the 36 credit hours of courses taken in a particular year for all students of the university. Students' year means, taken directly from students' formal records before and after the study, at 2nd year and 3rd year levels respectively, were used as a measure of academic performance. Overall weighted mean (OWM), which in this case was the simple average of 2nd year and 3rd year means, was also used as a 'composite' measure of academic performance.

## Other Measures

The survey included items inquiring about the participants' gender, age and employment status. Gender was dummy coded 0 for females, and 1 for males. Employment status was dummy coded 0 for those who did not have full-time paid jobs and 1 for those with full-time paid jobs. Age was dummy coded 0 for those less than 18 years of age; 1 for those in the age category 18 to 24; 2 for those in the age category 25 to 35; and 3 for those older than 35 years of age.

## Analysis

Data were analysed by means of descriptive statistics and correlation analysis (Spearman's rho).

## Results

The means, standard deviations and average minimum and maximum values of students' commitment to their university, self-esteem, OCB and academic performance are presented in Table 1.

	N	Mean	SD	Average min-max value
Commitment	195	6.27	1.10	2.50 - 7.00
Self-esteem	194	5.86	0.84	2.89 - 7.00
OCB	196	4.71	0.86	1.89 - 6.56
OWM	196	63	7.01	48.50 - 73.00

**Table 1:** Means and standard deviations of commitment, self-esteem, organisational citizenship behaviour and overall weighted mean (academic performance).

**Notes:** Commitment, self-esteem and OCB were measured on a Likert-scale ranging from 1 to 7, with the following anchors: 1=strongly disagree, 2=disagree, 3=somewhat disagree, 5=somewhat agree, 6=agree, and 7=strongly agree. Overall weighted mean (OWM) was measured as the simple average of 2nd year and 3rd year weighted means, and was taken directly from students' formal records. The student weighted mean is calculated out of 36 credit hours taken in any particular year.

The mean commitment of students to their university ( $M=6.27$ ,  $SD=1.10$ ) was well-above the midpoint of the scale, indicating a strong commitment of the students to their institution. The mean general self-esteem of students ( $M=5.86$ ,  $SD=0.84$ ) was also above the midpoint of the scale, suggesting a generally high self-esteem among the participants. While slightly above midpoint on the scale, the mean OCB of students ( $M=4.71$ ,  $SD=0.86$ ) was the lowest of the three scale variables: commitment, self-esteem and OCB. This suggests that students somewhat practiced OCB, but more needs to be done to encourage them to practice this behaviour. With the overall weighted mean (OWM) that allows a student to proceed or graduate beginning at an average of  $OWM=50$ , the mean performance of students ( $M=63$ ,  $SD=7.01$ ) was above average.

To put to the test the hypotheses advanced in this paper, a bivariate correlation analysis among the study variables was conducted. The results are shown in Table 2.

	1	2	3	4	5	6	7
1. Gender	-						
2. Age	-0.06	-					
3. Employment status	-0.09	0.48**	-				
4. Performance (OWM)	-0.01	0.02	0.06	-			
5. OCB	-0.03	-0.06	-0.03	-0.02	(0.72)		
6. Commitment	-0.02	-0.07	-0.04	0.00	0.24**	(0.86)	
7. Self-esteem	0.05	-0.06	0.10	-0.04	0.31**	0.21**	(0.76)

**Table 2:** Inter-correlations of the variables

\*\* Correlation is significant at 0.01 (2-tailed). Reliability coefficients, where relevant, are reported in parentheses

Generally there were low correlation coefficients (close to zero) between some study variables, suggesting that there was no relationship between the variables concerned. However, there were some significant correlations between some variables, including those that were hypothesised in this study.

As older students are more likely to have been employed before they continue their studies than younger students, a strong correlation between age and employment status ( $\tau=0.48$ ,  $\rho \leq 0.01$ ) was not surprising. The positive and significant correlation between self-esteem and commitment ( $\tau=0.21$ ,  $\rho \leq 0.01$ ), though not hypothesised in this paper, suggests that the students who reported high self-esteem also reported high commitment, and those who reported low self-esteem also reported low commitment. This could also be expected because students with high perceptions of self-worth would probably be more confident to identify

with their university than students with low evaluation of their worth, value or importance. Hypothesis 1 predicted that commitment to the university would be positively associated with OCB, and this was supported. Commitment was positively and significantly related to OCB ( $\tau=0.24, \rho \leq 0.01$ ), as shown in Table 2. Hypothesis 2 predicted that OCB would be positively associated with academic performance but that hypothesis was not supported ( $\tau=-0.02, \rho \geq 0.05$ ). Interestingly however, as shown in Table 3, when OCB was disaggregated into its dimensions, altruism (helping behaviour) was positively and significantly related to academic performance of students before and after the study and to the overall weighted performance ( $\tau=0.20, \rho \leq 0.01$ ;  $\tau=0.19, \rho \leq 0.05$  and  $\tau=0.21, \rho \leq 0.01$  respectively). Hypothesis 3 predicted that self-esteem would be positively related to OCB and, as shown in Table 2, the hypothesis was supported because self-esteem was positively and significantly correlated with OCB ( $\tau=0.31, \rho \leq 0.01$ ). As shown in Table 2, hypothesis 4 was not supported because self-esteem was not related to academic performance ( $\tau=-0.04, \rho \geq 0.05$ ).

In general, the results in Table 2 suggest that students with high commitment were more likely to report high OCB than students with low commitment. Similarly, students with high self-esteem were more likely to report high OCB than students with low self-esteem.

When OCB was disaggregated into its dimensions and these were respectively correlated with self-esteem, commitment and academic performance, as shown in Table 3, some interesting results emerged.

Variable	Self-esteem	Commitment	2nd year mean	3rd year mean	OWM
Altruism	0.09	0.18*	0.20**	0.19*	0.21**
Courtesy	0.24**	0.20**	0.01	0.04	0.10
Civic virtue	0.24**	0.16*	0.03	-0.04	-0.01
Sportsmanship	-0.02	0.13	0.09	0.08	0.08

**Table 3:** Correlation coefficients between dimensions of organisational citizenship behaviour and self-esteem, commitment and academic performance

\* Significant at 0.05 level. \*\* Significant at 0.01 level (2-tailed).

There were no significant correlations between sportsmanship and either self-esteem ( $\tau=-0.02, \rho \geq 0.05$ ), commitment ( $\tau=0.13, \rho \geq 0.05$ ), or overall academic performance ( $\tau=0.08, \rho \geq 0.05$ ). While there was no relationship between altruism and self-esteem ( $\tau=0.09, \rho \geq 0.05$ ), there were positive correlations between altruism and commitment ( $\tau=0.18, \rho \leq 0.05$ ), altruism and 2nd year level mean ( $\tau=0.20, \rho \leq 0.01$ ), altruism and 3rd year level mean ( $\tau=0.19, \rho \leq 0.05$ ), and altruism and overall academic performance ( $\tau=0.21, \rho \leq 0.01$ ). The other positive and significant correlations from Table 3 were between the following variables: courtesy and self-esteem ( $\tau=0.24, \rho \leq 0.01$ ), courtesy and commitment ( $\tau=0.20, \rho \leq 0.01$ ), civic virtue and self-esteem ( $\tau=0.24, \rho \leq 0.01$ ), civic virtue and commitment ( $\tau=0.16, \rho \leq 0.05$ ), conscientiousness and self-esteem ( $\tau=0.31, \rho \leq 0.01$ ), conscientiousness and commitment ( $\tau=0.15, \rho \leq 0.05$ ).

It is interesting to note that of all dimensions of OCB, only altruism was positively and significantly associated with academic performance, indicating that a student who reported high altruistic behaviour was more likely to perform better than a student who reported low altruistic behaviour.

## Discussion

Since 1983, when Organ and colleagues coined the term OCB, the number of studies investigating this and other related concepts has been growing at an increasing rate (Podsakoff *et al.*, 2000), but the application of this concept within learning environments has been limited. Even within published work, the majority of studies researched predictors of OCB, and only a few studies related the concept to objective measures of performance or effectiveness (Podsakoff *et al.*, 2000). This exploratory study adds value in at least two ways. First, it shows that OCB is somewhat practiced within student population, and that some work relevant predictors of OCB may apply in learning environments. Second, it shows that some elements of OCB can be positively related to objective measures of student academic achievement.

As predicted, commitment to the university was positively and significantly related to OCB. Thus, in the same way that workers who feel attached to their organisation (commitment) would go beyond the call of duty to assist colleagues and their organisation (OCB), learners who feel attached to their learning institutions would go an extra mile to assist colleagues, and would actively be involved in extra-curricula activities on behalf of their institution. This is in line with the reviews of Podsakoff *et al.* (2000), and the meta-analytic review of Organ and Ryan (1995), both of which reported that along with fairness and job satisfaction, organisational commitment was one of the consistent predictors of OCB within the category of work attitudes.

While the 'composite' measure of OCB failed to correlate with objective measures of academic performance in this study, one dimension of OCB - altruism or helping behaviour - positively and significantly correlated

with objective academic performance. It might be that students who assist others in assignments and revision have the opportunity to hone their skills, and therefore perform better in tests and exams. It might also be that as these altruistic learners help others, they become aware of their own weaknesses in different courses, and hence become more able than others to reduce their weaknesses before tests and exams.

This finding differs from that of Allison *et al.* (2001) in whose study the 'composite' measure of OCB and both sportsmanship and conscientiousness became significant predictors of average cumulative grade point, but it agrees with the review of results reported by Podsakoff *et al.* (2000) in which the helping behaviour was related to every indicator of objective performance except customer complaints in one study, and where sportsmanship was found to have relatively limited effects.

Much as the reviews of Organ and Ryan (1995), and Podsakoff *et al.*, (2000) suggested that demographic and personality/dispositional variables had little or no impact on OCB, they also indicated that not all such variables had been subjected to empirical investigation. One variable that does not appear in their reviews is self-esteem, the self-concept that has been described as trait-like (Beauregard, 2006). The self-esteem variable was built into this study because prior research indicates that it is associated with academic performance (Pepi *et al.*, 2006; Yu *et al.*, 2006), but in this study it was associated with OCB, not academic performance.

It is possible that a student with high perceptions of self-worth participate with confidence in university related extracurricular meetings (civic virtue), and is not only confident enough to turn assignments in on time, but also actively participate in class discussions (conscientiousness).

The possible reason self-esteem did not correlate with academic performance in this study is suggested by Alves-Martins and Peixoto (2002) who, according to Yu *et al.* (2006: 334), concluded that "the effect of academic achievement on self-esteem existed only among younger adolescents" as older students "might adopt defence mechanisms to protect their self-esteem by placing less importance on academic achievements".

The results of this study have an important implication for business educators. In addition to assisting students acquire important skills such as time management and reading critically and reflectively, educators could also encourage students to provide a helping hand to others (altruism), as the latter might impact positively on their performance.

## **Conclusion and prospects for future research**

The purpose of this study was to explore whether OCB is practiced within learning environments, and whether relationships established within work environments can be established within learning environments. It was hypothesised that both self-esteem and students' commitment to their university would be positively correlated with OCB and, in turn, OCB would be positively correlated with academic achievement of students. Data were analysed by means of descriptive statistics and correlation analysis. While the mean of students' OCB was slightly above midpoint, indicating that students somewhat practiced OCB, it was argued that more needs to be done to encourage learners to engage in this behaviour, especially OCB directed at other learners (altruism). Both self-esteem and commitment to the university were positively and significantly related to OCB. However, only one dimension of OCB - altruism - was related to formal academic achievement of students.

Like many studies of this nature, this study had some limitations. First, the cross-sectional nature of the study restricted the findings to correlational rather than causal relationships. Thus reverse causality in which, for example, academic performance affects OCB rather than the assumption made here cannot be ruled out. It is possible for instance that a student who performs well academically has more time to spend on helping others (altruism) than a struggling student.

The study was carried out on limited sample of learners, mainly because it was relatively easy to match the academic achievement and self-reported attitudes of this group without compromising the confidentiality of the study. Future studies can benefit from a diversified sample from within the university and beyond.

While care was taken to ensure that different sources of information were used between self-reported variables and objective performance measures, to reduce common method bias, this bias could not be totally eliminated because self-esteem, commitment and OCB measures in this study constituted self-report survey measures.

Some of these limitations suggest an opportunity for more research into this line of inquiry. It would be interesting to establish whether these results could be replicated in a study in which OCB of students was reported by either their peers or lecturers. A longitudinal research design that follows students through their

studies into their careers would shed more light into whether students who apply OCB within learning environments continue to do so in their careers. It would also be interesting to find out whether a seminar dedicated to imparting OCB skills could result in more students exhibiting OCB. This could be achieved by administering a pre-seminar and post-seminar testing, and using a control group of students who did not attend such a seminar. MacKenzie *et al.* (1993: 71) argue that “managerial evaluations of performance are determined as much by a salesperson’s OCB as they are by a salesperson’s objective sales productivity”. Within academic settings, the extent to which lecturers (who evaluate students) take into account the OCB of students when they grade them could be evaluated, especially in subjects where lecturers’ professional judgment and discretion are called for. Given that OCB promotes important habits such as cooperation, responsibility and selflessness, it is possible that lecturers consider OCBs of students in their judgments.

As suggested by Allison *et al.* (2001), students should be encouraged to practice OCB, not only because it is invaluable for their career progress when they get employed, but also because in the short term, it can affect their academic achievement.

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## Appendix - Scale Items

### Organisational citizenship behaviour

1. I willingly give my time to help other students who have school-related problems
2. I am willing to take time out of my busy schedule to help other students with their school work
3. I check with other students before initiating actions that might affect them (e.g. in team projects)
4. I take steps to try to prevent problems with other students in my classes
5. I attend special classes or other meetings that students are encouraged but not required to attend
6. I attend and actively participate in school meetings
7. I do not always find fault with what NUL is doing
8. I do not always focus on what is wrong with my situation but focus on the positive side of it
9. I turn in homework, projects, reports and other school work earlier than is required
10. I return phone calls from students and staff, and respond to other messages and requests promptly

### General Self-esteem

1. On the whole, I am satisfied with myself
2. At times, I think I am no good at all\*
3. I feel that I have a number of good qualities
4. I am able to do things as well as most other peoples
5. I feel I do not have much to be proud of\*
6. I certainly feel useless at times\*
7. I feel that I'm a person of worth, at least on an equal plane with others
8. I wish I could have more respect for myself\*
9. All in all, I am inclined to feel I'm a failure\*
10. I take a positive attitude towards myself

### Commitment to the University

1. I am quite proud to tell people I study with NUL
2. I feel proud to be part of NUL
3. I am willing to put myself out to help NUL
4. I would recommend a close friend to join NUL
5. I feel a strong sense of belonging to NUL
6. To know that my studies had made a contribution to the good of NUL would please me
7. I sometimes feel like leaving this university for good\*
8. I feel myself to be part of NUL

\*Reverse-coded