

## The perception of engineering and ICT students on group leaders' ethics in group project implementation: a case in a technical university

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**ABSTRACT:** The aim of this research was to explore students' perspectives on the level of group leaders' ethical standards when leading group projects. One hundred and fifty-five students taking the Ethnic Relations subject in the Technical University of Malaysia Malacca (UTeM), in Durian Tunggal, Melaka, Malaysia, participated in this study. The students answered the Craig and Gustafson perceived leader integrity scale (PLIS) to indicate their perception of ethics and integrity of the group leaders. The descriptive results have shown that the item related to the leader's personal interest ranked highly among issues that the students perceived as being unethically practiced by the group leaders. The majority of them also perceived that the group leaders had low ethical standards, while leading the team to complete the group projects. Therefore, there is an urgent need for students to be constantly exposed to the concept of ethics and integrity from early on. Lecturers also play a crucial role in reinforcing these concepts by continuing to share cases and stories about the importance of ethics and the consequences of its absence in terms of its impact on the nation's development and prosperity.

### INTRODUCTION

The rapidly changing socio-economic environment has increased the demand for transparency, requiring that governments review and adjust mechanisms to ensure that the actual behaviour corresponds to what is expected [1]. Therefore, ethics and integrity as a concept have gained prominence in research on government and governance [2-4], due to the impact both bring to the macro- and micro-level environment. Issues like mismanagement, abuse of power, and corruption, among others, are often associated with the lack of ethics and integrity [5-8]. The implication of these issues has severe repercussions on countries, societies, organisations and individuals, in terms of economy, profitability, harmony and credibility, if not appropriately addressed.

The word ethics originated from the Greek word *ethos*, which translates to *customs, conduct or character*. Ethics is argued to be concerned with the kinds of values and morals an individual or a society finds desirable or appropriate [9]. According to this argument, *ethics is concerned with individuals' virtuousness and motivations* [9]. It is also critical to understand that ethical theory provides a set of rules or principles that guide people in deciding what is right or wrong, good or bad in a given situation. Integrity is derived from the Latin word *integras*: intact, whole, harmony, with integrity as *wholeness* or completeness. Montefiore refers this to the consistency and coherence of principles and values [10], and Karsing points out that in such an environment *a person is capable of carrying out his responsibilities adequately, carefully, and responsibly, taking into account all relevant interests* [11].

Leadership is one of the most important factors in developing a stronger ethics and integrity culture in an organisation [6][12-14]. When it comes to leadership, ethics is concerned with what leaders do and who leaders are; in other words, their conduct and virtue [9]. One of the most important aspects of leadership is influence, and having influence allows a leader to influence the people they lead. As a result, a leader with influence will be endowed with power, which he or she must use responsibly. As a result, the ability to disseminate power responsibly is critical, because any decision made by a leader carries a significant ethical burden due to the potential consequences for the people he or she leads.

Extant literature has shown that when a leader is ethical and possess positive integrity, the implications are positive. Quick and Goolsby have found that senior-level executives identify integrity as an essential characteristic of effective leaders and followers [15]. Similarly, the findings discussed in a report by the Ethics and Compliance Initiative show that there is a strong direct correlation between direct supervisors' improved leadership behaviours and employee trust of the system [16].

It has been found that there is twice as much respondents in all five global regions surveyed, who believed that when leadership is strong, there should be reports of misconduct and accountability among those who broke the rules versus supervisors perceived to have weak leadership behaviours. Various leadership styles and behaviours have also been found to positively impact ethics and integrity [17-19].

Higher education institutions (HIEs) across the globe, including Malaysia, have been incorporating the topic of ethics and integrity as part of their curriculum. However, incidences of academic dishonesty, such as cheating and plagiarism, are said to be on the rise, particularly among engineering students [20]. These incidences could be attributed to the students' lack of ethics and integrity. Various reasons have been listed as contributing to this issue, including reasons at the individual, societal and organisational level.

Several studies have been conducted to better understand the myriad contributing factors, while also proposing intervention programmes to mitigate the impact of those factors [20-22]. It is suggested, among other things, that institutions integrate ethics instruction throughout the formal curriculum to foster students' desires to engage in positive ethical behaviours through a variety of approaches that stimulate high-quality experiences [21].

Therefore, it is crucial to examine how these approaches impact on students' perception of ethics and integrity. This study, undertaken among students from the Technical University of Malaysia Malacca (Universiti Teknikal Malaysia Melaka - UTeM), Durian Tunggal, Melaka, Malaysia, has explored students' perception of group leaders' ethics and integrity in the implementation of group work projects. The results of the study could provide an understanding of the group leaders' level of ethics and integrity when leading their teams.

## GROUP PROJECT ASSESSMENT FOR ETHNIC RELATIONS SUBJECT

Ethnic Relations is one of the compulsory subjects offered under the general education subjects (abbreviated in Malay as MPU) in every higher education institution, public or private, in Malaysia. Among the main aims of the subjects offered under MPU is to produce holistic graduates and instil a sense of patriotism and nation-building, as well as positive values and attitudes in the younger generation, particularly among students.

The Ethnic Relations subject focuses on the basic concepts of culture and ethnic relations in Malaysia, where it provides exposure to students about ethnic relations in the development of the Malaysian society. At the same time, the subject also aims to give an understanding of the global challenges facing ethnic and cultural relations at the Malaysian level.

The assessment of the subject is divided into two primary assessments, which are the coursework and the final examination. Seventy percent of the marks are given to the coursework, and the remaining 30% is evaluated in the final examination. The group project takes a substantial portion of the coursework evaluation, where 50% is allocated to the group project to be executed by the students.

Case studies are one of the most popular tasks given to the students, where they have to work in a group of five to six according to the dateline stipulated by the lecturers. The project, which is worth about 30% of the overall assessment, requires every group to submit a written report. Another 20% of the marks are assessed through group presentations.

## RESEARCH METHODOLOGY

### Research Design

The study used quantitative methods that focused on objective measurements and numerical analysis of data collected via polls, questionnaires or surveys [23]. The descriptive quantitative research design was chosen because it allowed the researchers to focus on gathering numerical data about students' perceptions on group project leaders' ethics and integrity in the Ethnic Relations subject at UTeM.

### Research Instruments

This study utilised the Craig and Gustafson perceived leader integrity scale (PLIS), which is founded on utilitarian ethical theory [24]. The PLIS attempts to assess leaders' ethics by measuring the extent to which co-workers perceive them to be acting in accordance with rules that would result in the greatest good for the greatest number of people. PLIS ratings were found to be strongly and positively related to subordinates' job satisfaction and negatively related to their desire to quit [24]. The instrument assesses a leader's ethical integrity, such as a supervisor or group or organisational leader.

Craig and Gustafson's PLIS is made up of 30 questions that assess one's perceptions of another person's integrity in the workplace [24]. According to them, the PLIS responses indicate how much one person regards another person's behaviour as ethical. Following the collection of data from respondents, the scores on two items (9 and 30) have been reversed according to the adopted protocol (i.e. where 1 becomes 4; 2 becomes 3; 3 becomes 2; and 4 becomes 1).

The next move suggested by Craig and Gustafson is to add up the answers to all 30 questions, with a low score indicating a highly ethical leader [24]. A high score indicates that the leader is unethical. The following is an explanation of what each score represents. The score in this study is a measure of the students' perceptions of their group leader's ethical integrity. Based on previous findings [24], the total score can be interpreted as follows:

- 30-32 - highly ethical. If the score is in this range, the students regard their leader as highly ethical. They have the impression that the leader is extremely trustworthy and principled.

- 33-45 - moderately ethical. Scores in this range indicate that the students consider their leader to be moderately ethical. Their impression is that the leader may engage in unethical behaviour under certain conditions.
- 46-120 - hardly ethical. Leaders with scores in this range are regarded as highly unethical. According to the students, the leader they evaluated engages in dishonest, unfair and unprincipled behaviour almost every time he or she has the opportunity.

## Respondents

One hundred and fifty-five students from four faculties; namely, from the Faculty of Technology Management and Technopreneurship; Faculty of Information and Communication Technology; Faculty of Electrical Engineering; and Faculty of Mechanical and Manufacturing Engineering Technology, enrolled in the Ethnic Relations subject were selected to participate in this study.

## Research Data Collection

The researchers employed Google Forms, which is a cloud-based data management tool used for designing and developing Web-based questionnaires in collecting the data. Links were shared with the students, and they were briefed about the research and their role in answering the questions.

## RESULTS

### Profile of Respondents

The majority of the students, 74 (47.7%) students, were from the first year of study, followed by 54 (34.8%) students from the second year and 27 (17.4%) students from the third year.

From this number, 64 (41.3%) students were from the Faculty of Technology Management and Technopreneurship; 49 (31.6.5%) students were from the Faculty of Electrical Engineering; 22 (14.2%) students were from the Faculty of Mechanical and Manufacturing Engineering Technology; and 20 (12.9%) students were from the Faculty of Information and Communication Technology. Ninety one (58.8%) of these students were male, and 64 (41.2%) students were female.

### Rank Scores of the PLIS

Table 1 depicts the rank scores of the PLIS based on the students' perception of their leaders' ethical standards. Four items that can be considered as the most problematic by the students about their leaders' ethical standard are: putting their personal interests ahead of the group ( $M = 2.41$ ,  $SD = 0.95$ ); enjoying turning down requests ( $M = 2.05$ ,  $SD = 0.89$ ); would risk other people to protect themselves in doing their assignment ( $M = 2.05$ ,  $SD = 0.94$ ); and being mostly interested in tasks that bring personal glory or recognition ( $M = 2.01$ ,  $SD = 0.94$ ).

The students also indicated that among the least worrying things about their leaders' ethical standards are: they would steal from the group ( $M = 1.43$ ,  $SD = 0.76$ ); would spread rumours or gossip to try to hurt people or the group ( $M = 1.50$ ,  $SD = 0.82$ ); and is evil ( $M = 1.50$ ,  $SD = 0.80$ ).

Table 1: Rank scores of PLIS.

Items	Mean (M)	Standard deviation (SD)
Puts his or her personal interests ahead of the group.	2.41	0.95
Enjoys turning down requests.	2.05	0.89
Would risk other people to protect himself or herself in our group assignment.	2.05	0.94
Is not interested in tasks that do not bring personal glory or recognition.	2.01	0.94
Has low moral standards.	1.96	0.93
Would threaten a group member if he or she thought they could get away with it.	1.94	0.95
Deliberately fuels conflict between other group members.	1.90	0.92
Would treat some group members better if they were of the other sex or belonged to a different ethnic group.	1.86	1.03
Cannot be trusted with confidential information.	1.79	0.81
Would lie to me.	1.78	0.90
Ridicules group members for their mistakes.	1.77	0.87
Likes to bend the rules.	1.77	0.91
Would deliberately avoid responding to email, telephone or other messages to cause problems for someone else.	1.77	0.91
Would do things that violate the lecturer's instructions and then expect others to cover for him or her.	1.70	0.93
Would try to take credit for other people's ideas.	1.69	0.88

Would allow someone else to be blamed for his or her mistake.	1.66	0.89
Would deliberately exaggerate his or her group member's mistakes to make them look bad to others.	1.65	0.86
Would make trouble for someone who got on his or her bad side.	1.64	0.84
Is a hypocrite.	1.63	0.87
Would deliberately distort what other group members say.	1.60	0.86
Would falsify records if it would help his or her work situation.	1.58	0.81
Would withhold information or constructive feedback because he or she wants someone to fail.	1.57	0.81
Is vindictive.	1.56	0.82
Would engage in sabotage against the group.	1.53	0.82
Is rude or uncivil to group members.	1.53	0.82
Shows unfair favouritism toward some group members.	1.52	0.77
Would try to hurt his or her group member's reputation because of a grudge.	1.51	0.81
Is evil.	1.50	0.80
Would spread rumours or gossip to try to hurt people or the group.	1.50	0.82
Would steal from the group.	1.43	0.76

It is crucial to note that the students perceived that the group leaders are putting the leaders' self-interests ahead of the group. This could be due to the pressure of leading group projects in a highly pressurised environment in terms of tight datelines, the number of coordination needed and the burden of responsibilities. Being the representative of their groups, the leaders have to cope with these pressures, which in some cases can be compound by their limited experience. It could have resulted in some of them protecting their self-interests instead of the group.

#### PLIS Scores of Leaders' Ethical Standards

Table 2 shows the PLIS scores of the leaders' ethical standards as perceived by the students. Seventy-nine (51%) of the students have the perception that their leaders are hardly ethical. Another 59 (38%) students perceive their leaders to be moderately ethical and only 17 (11%) students are of the opinion that their leaders are highly ethical.

Table 2: PLIS scores of leaders' ethical standards.

Level of ethics	Number
Highly ethical	17 (11%)
Moderately ethical	59 (38%)
Hardly ethical	79 (51%)

While the PLIS scores of the leaders' ethical standards have shown that the majority of the students perceive their group leaders as hardly ethical, this perception could be attributed to several factors, such as lacking in communication and coordination between leaders and group members, resulting in misunderstanding among them. This could play a contributing role in the low ethical standards perception by the majority of the students towards their group leaders. In general, the extent of ethical leadership among the surveyed students, is within an acceptable level, between moderate to high [25][26].

#### CONCLUSIONS

It has been argued that leaders embracing the moral person perspective and valuing integrity are seen as trustworthy, caring, honest and fair [27]. They engender a strong sense of engagement and commitment among their followers. The results of this provide some understanding of how students perceive issues they regard as unethical of their group leaders and how these issues affect the students' scoring of their leaders' level of ethics.

This study has shown that there is a need for leadership training for students that emphasises moral reasoning, and moral awareness as a means of cultivating ethical decision makings [25]. Considering the ever-increasing number of issues that can be attributed to the lack of ethics and integrity, causing untold damage to communities and countries, the need for leadership training is of paramount urgency.

University students, as future leaders, should be equipped with the right ethical, integrity and moral compass to help them not only in leading group projects in the university, but in the longer term preparing them for participation in the job market after graduation.

At the same time, it is also incumbent upon the lecturers to be constantly vigilant about the need to be morally upright and conform to high ethical standards and demonstrate integrity by sharing examples of cases or stories from their own environment. That storytelling could play a strong reinforcing role in education about the crucial impact of ethics and integrity on the nation's development and prosperity.

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