Academic Achievement and Social Interaction: Are There Causal Effects?

Ahmad Yusairi Bani Hashim^{*}, Hambali Arep, Abdul Rahim Shamsudin

Faculty of Manufacturing Engineering, Kolej Universiti Teknikal Kebangsaan Malaysia, Locked Bag 1200, Ayer Keroh, 75450 Melaka, MALAYSIA

Abstract

A significant number of students exhibit sudden drop in their academic achievement some time after attending university courses. We deduce to why this phenomenon occurs. We uncover this phenomenon through a systematic investigation by applying the instrument suggested by Glass. We build a set of questionnaire with minor modification to suit our experiment methods. The results show that there is a strong effect of social interaction to students' academic achievement.

Keywords: Academic achievement, social interaction

1. Introduction

Attending a full-time program at a university means spending a large amount of time in classes, lecture halls listen to instructions and lectures. Moreover, practical sessions such as tutorials, workshops, and laboratory exercises also require countless time. Overall, a student spends a greater part of his or her time within university compound, in addition to independent study and homework time. In compliance to the requirements for completing a course, a student works in a team doing assignments, laboratory reports, and other course's activities. This means he or she interacts heavily with fellow classmates.

Some suggest that interaction with fellow team members increases a person's maturity and adaptability to later work force. However, we opt to see this on another perspective that is to study psychological symptoms contributing to students' reaction to his social surrounding. Glass (1995) explains that a person exhibits some symptoms when interacts with specific people, which she terms them as toxic people. Feeling emotionally numb after talking to this person or finding oneself overeating after being around this person are examples of such symptoms. Glass defines a toxic person is "anyone who has poisoned your life, who is not supportive, who is not happy to see you grow, to see you succeed, who does not wish you well. In essence, he or she sabotages your efforts to lead a happy and productive life."

There are researches such as work done by Albaili (2000) who reports that motivation is the most powerful factor that separated low grade point average (GPA) students from high GPA peers. Hayes et. al (1987) also report that motivation is the factor that strongly isolated the low achieving high school group from their peers in the high achieving group. In fact, Idris (2000) discusses ways to motivate students to learn. Djatnika et. al (2000) convey that the most determined factor in achieving high GPA are anxiety and intelligence. Nevertheless, motivation factor contributes the least factor in achieving high GPA. Malka et. al (2005) find that students perform well due to incentives they expect to get for good grades obtained. Plant et. al (2005) report that the amount of study by university students is a poor predictor of academic performance. We, however, suspect that there are causal effects of social interaction to students' achievement and performance. We divide this paper into five sections. The first section is the introducing remarks on the study followed with objectives of study with scope, the research methods, and ends with implications and conclusions

2. Motives of the study

We have experienced unrecorded situations where students complained about their difficulty of adapting to

^{*} Corresponding author. Tel: 06-2332424; Fax: 06-2332421; Email:yusairi@kutkm.edu.my

university setting (e.g. credit hours, English language skill). Some students exhibit less interest to study through behaviors like late attendance, frequent sick leave especially when there is a test, or simply disappear without a notice. Our faculty had run a motivation seminar for low achieving students. Unfortunately, there was no follow up study on the significance of this seminar that contributed to the students' achievement. This motivates us to investigate what actually troubles the students. We decide to look into a view that invasive to students' personal lives (e.g. "What do you think of people surround you?").

3. Method

This study involved 110 students of two programs in the Faculty of Manufacturing Engineering. There are 50 subjects from diploma program while 60 subjects are from undergraduate program with major in Robotics & Automation. Table 1 lists the number of respondents with respect to their program of study. We neglected segregation of gender in studying the responses. Glass proposes sets of questions that range from emotional (27 items), behavioral (9 items), physical (19 items), and communication (23 items). These questions she calls it by Toxic People Quiz where the result will show a wide range of effects a toxic people might have on the person. In fact, this quiz allows subjects to identify toxic people in her life. However, we launched the questionnaire with a few modifications.

Table 1. The number of respondents with respect to program of

study		
No.	Program	No. of
		Respondent
1	Diploma in Manufacturing Engineering	50
2	Bachelor of Manufacturing Engineering (Robotics & Automation)	60

4. Results and discussion

We examined each item in the questionnaire by the percentage of agreement. We addressed items that have achieved the overall percent agreement of close to 50% or more and is said to have a high response. For the emotional symptoms we received high responses for items ("Do you feel that the person "deep down" doesn't like you, even though he or she never says mean things to you?"), ("Do you feel angry and irritable around the person?"), ("Does this person make you feel disgusted?"), ("Do you lack respect for the person or

does he or she disrespect you?"), ("Do you feel emotionally relief when you are away from the person?"), and ("Would you rejoice if you never had to see the person again?"). For the behavioral symptoms we received high responses for items ("Do you want to get away from him or her physically?"), ("Do you plan ways to avoid the person?"), ("Does the person depersonalize you or negate your importance?"), and ("Does the person treat you differently in public than in private?").

For the physical symptoms we received high responses for items ("Does the person give you a headache?"), and ("Do you want to run away from this person and never see him or her again?"). Lastly, for the communication symptoms we received high responses for items ("Do you find that you walk on eggshells, are afraid to be yourself, and choose your words carefully when you talk to this person?"). ("Does the way he or she communicates nonverbally (i.e. with gestures, posture, and facial) turn you off?"), ("Do you find yourself not wanting to talk to the person on the phone?"), ("Do you clam up when you're around the person?"), ("Does the person negate almost everything you say?"), ("Do you feel at peace or relieved when you haven't spoken to the person for a while?"), and ("Do you feel that his or her value system is to oppose to yours that you cannot even talk to him or her?").

Figure 1 and Figure 2 show responses in term of frequencies of how diploma respondents and undergraduate respondents think the existence of toxic people affect their academic performance. Both charts exhibit near normal distribution of the frequencies. Majority of respondents (47) agreed that toxic people do give them some effect to their academic performance. Whereas, a small number of respondents (9) feel that toxic people give them a very significant effect on their academic performance. However, some respondents (28) feel that toxic people have no effect to their academic performance.

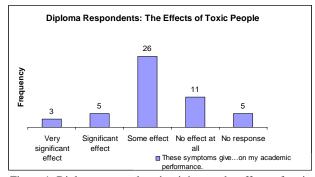


Figure 1. Diploma respondents' opinion on the effects of toxic people on their academic performance.

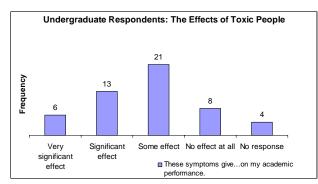


Figure 2. Undergraduate respondents' opinion on the effects of toxic people on their academic performance.

5. Implications and Conclusions

The results reveal that, in spite of approaches taken by university administration to improve study conditions, social interaction which students encounter the most do contribute to students' performance and yield to academic achievement. Using these results as evidence, a specific seminar could be designed to tailor the needs for such a deficiency. We believe that there exists a trend where "the strongest lives" such that grades obtained do play an important role in students' survival after graduation. While students are under great pressure to perform well, we as academicians must find effective yet friendly ways to lead students into high motivation and interest in their study. Later, it is left to students to decide whether to do well or else.

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Biographical information

AHMAD YUSAIRI BIN BANI HASHIM obtained the Bachelor of Science from the Pennsylvania State University, Master of Education from Universiti Teknologi Malaysia, Master of Science from Universiti Putra Malaysia. He is lecturer in robotic and automation Faculty of Manufacturing Engineering, Kolej Universiti Teknikal Kebangsaan Malaysia.

HAMBALI BIN AREP obtained the Bachelor of Engineering from the Universiti Teknologi Mara, Master of Engineering from Loughborough University. He is lecturer in robotic and automation Faculty of Manufacturing Engineering, Kolej Universiti Teknikal Kebangsaan Malaysia.

ABDUL RAHIM BIN SHAMSUDIN obtained the Bachelor of Engineering from the University of Glasgow, Master of Engineering from Universiti Teknologi Malaysia. He is lecturer for diploma program Faculty of Manufacturing Engineering, Kolej Universiti Teknikal Kebangsaan Malaysia.