

What Motivates You towards Academic Success? A Comparative Study

Samira Fahmi, The Petroleum Institute, UAE

The Asian Conference on Language Learning 2015
Official Conference Proceedings

Abstract

Student motivation, a very difficult element to identify in ‘academic success’ (AS), has been the focus of many studies in the educational field around the world; the United Arab Emirates (UAE) is no exception. Faculty often find it challenging to align their teaching strategies and course learning outcomes with the factors affecting student motivation. Research focusing on analyzing motivating factors behind student success at the Petroleum Institute (PI) has been ongoing for the past 18 months. Findings from the original research show that contrary to the teacher’s perception, the students are more concerned with the quality of education than previously thought. The current study follows up on these findings by comparing the data collected at the PI, an engineering-only government-sponsored university, and data collected from Abu Dhabi University (ADU), a private university offering multiple degree options in a variety of areas. Results of the study and possible explanations for these results will be discussed.

Keywords: motivation and ‘academic success’

iafor

The International Academic Forum

www.iafor.org

Introduction

The last two decades have witnessed massive expenditures in the field of higher education in the UAE. The UAE government as well as private sector entities have spent millions of dollars in order to establish high quality educational institutions, especially at the tertiary level. Once created, these institutions have to compete with international universities that have established satellite campuses in the country, and in order for them to do that, they strive to secure national and international accreditation.

The Petroleum Institute-University and Research Center (PI), the UAE's leading state owned engineering university and research center in, and Abu Dhabi University (ADU), the number one private university in the emirate, are cases in point. Both universities were successful in achieving national accreditation through the Committee for Academic Accreditation (CAA), the UAE Ministry of Higher Education, and international accreditation through the Accreditation Board for Engineering and Technology (ABET).

This study compares students' motivating factors towards 'academic success' in both institutions. However, before we discuss the study and its results in detail, it is worth providing some background information about the institutions and the study as a whole. PI was founded by Emiri Decree in the year 2000, and officially started operation in 2001. The Abu Dhabi National Oil Company (ADNOC) is the main sponsor of the PI and all PI graduates are guaranteed employment at ADNOC and its group of companies. PI was established based on the Colorado School of Mines (USA) curriculum and offers five engineering majors (electrical, mechanical, chemical, petroleum and geosciences). There are approximately 1,970 students (90% Emirati, 10% children of Arab/South Asian expats plus students from China and African oil producing countries). These students achieved a minimum 75% average or equivalent in their high school diploma with a minimum of 75% in the science subjects. ADU, on the other hand, was established as a private venture in 2003, and has grown to become the leading private university in Abu Dhabi with campuses in Abu Dhabi and Al Ain. ADU has a diverse student population of around 5,930 (51% Emirati, 49% children of Arab/South Asian expats among other international students). The university offers 21 degrees across its three degree granting colleges (Engineering, Business/Finance and Arts & Sciences) and the university college. The minimum entry requirement for ADU is 66% high school average.

The present study stems from a pilot project that originally started at the PI in the summer of 2012. This pilot project dealt with different areas of teaching and learning, namely proficiency exams, curriculum development and motivation. This was followed by a PI-wide study that focused on motivation and 'academic success'. The second part of the study was twofold: 1) a comparison between female and male students' perception of motivating factors towards 'academic success', and 2) a comparison between students' perceptions of motivating factors and teachers' perceptions of their students' thoughts on 'academic success'. The ways in which teachers can align their learning outcomes and expectations with students' perceptions was also addressed in the second part. Discussions that this study triggered when presented at international conferences led to the current study which aims to identify the elements of similarity/difference that exist among UAE students when it comes to

motivation and 'academic success'. We, therefore, started the final part of the study with the following hypothesis in mind "Although both ADU and PI cater to the UAE population, their demographics are different, so the students' perceptions of 'academic success' are most probably different"

Review Of The Literature

There is no denying the fact that the phrase 'academic success' (AS) has a wide range of definitive applications, most of which depend on who you are talking to -- students, faculty, family or employers -- and often, depending on your location in an increasingly globalized world. Seeking a universal meaning for the term 'academic success' can lead to frustration. Trying to come up with one characterization of success has intrigued many who have been working to understand the human mind for millennia. "For some success is a process and for others it is considered a product" (Hamilton and Ghatala, 1994). To illustrate, when you say someone is being successful in their academic career, it does not mean that someone has achieved 'academic success'. The complexity of understanding this topic of 'academic success' is daunting, considering the density of these differently perceived characteristics of success.

According to cognitive theory (Bandura, 1986), human beliefs, ideas and cognitive competencies are modified by external factors such as a supportive teacher, a stressful roommate, or even a noisy environment. For example, 'academic success' is related to those experiences that match internal perceptions. Knowing that our students come from home environments and academic settings that are different from those of western students (CSIS, 2013), we have explored the perspectives of our learners in relation to such concepts and values experienced by them in order to understand the discourse of motivation in our particular social and cultural context here in the UAE.

"Anthropology of education" is a term that is currently being used in instructive courses to define the teaching of competencies necessary to work with important topics such as education, learning, and knowledge in an increasingly globalized world. Looking at our data from this international standpoint is helping us to understand why some of our well-planned approaches to teaching and learning need to be re-addressed in order to meet student requirements for achieving 'academic success'.

Having reviewed an informal student survey from Ferris State University in the United States with nine pages dedicated to what students believe 'academic success' to be, we found that Emirati students at the Petroleum Institute and Abu Dhabi University had similar concerns and responses to their US counterparts. Nonetheless, these undergraduates had divergent priorities. With a closer look at the demographics of the UAE, many different cultural identities appear in the character of the youthful academics who are experiencing rapid social and educational change (Findlow, 2006, p. 23). Student opinions are, unsurprisingly, likely to be different. These learners are the new generation of the UAE being exposed to 'otherness' in a way that their parents were not, which paints an evolving picture of this young country as it strives to produce a national identity (ibid).

The UAE is dealing with a small, traditionally conservative population that, in the period before statehood, 1971, had no formal education system. It is now a

“politically, economically and technologically-sophisticated federation of seven states” (ibid). Schneider and Lee, 1990, state that now, “Parent expectations are extremely powerful and are transmitted through a cultural context in which education is highly valued because it leads to self-improvement and increase in self-esteem”. An oft-repeated comment by PI students is that they are becoming engineers because it is a parental wish, not necessarily their own. In a summary publication of a Gulf Roundtable discussion at the Center for Strategic and International Studies (CSIS, 2013), the change in perceptions of what an education can do for one is developing summarily. The Roundtable team proclaims that ‘academic success’ is related to cultural and economic characteristics. With the PI students assured of jobs when they graduate and the ADU students knowing the competitive world they will be entering upon leaving their safe university haven, it is expected that they will both have different concerns and priorities.

Referring back to Gardner (1985) and his integrative motivational theories, the researchers of the new millennium have accepted his macro-perspective as useful to compare the motivational prototypes of whole learning communities. They drew inferences from his work on intercultural communication. Nevertheless, these broad factors such as multi-culturalism and language globalization needed to be expanded to include the current motives being expressed by students in their immediate learning situations. McGroarty (2001) summarized this situation perceptively, as cited in Dornyei (2005).

"Existing research on motivation, like much research in educational psychology, has begun to rediscover the multiple and mutually influential connections between individuals and their many social contexts, contexts which can play a facilitative, neutral or inhibitory role with respect to further learning." (p.86.)

In line with this thinking, Lizzio et al. (2002) in a study that looked at students' views of the learning environment and the subsequent academic results claim that “students' perceptions of their current learning environment were a stronger predictor of learning outcomes than prior achievement at school.” Additionally, Crede et al. (2008) proposed that "study habits and skill measures improve prediction of academic performance more than any other non-cognitive individual difference variable examined to date and should be considered the third pillar of ‘academic success’.”

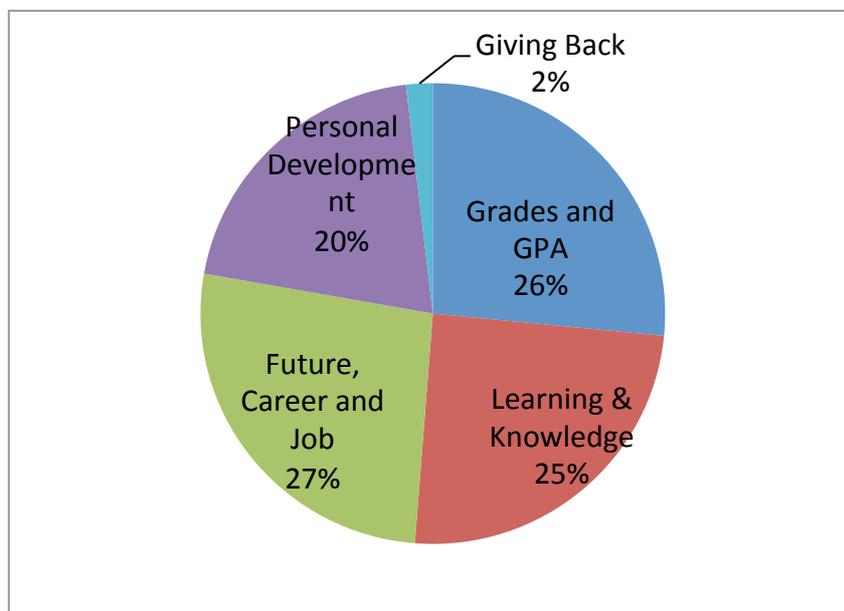
Biggs (1989) 3P model addresses the issue of student perceptions and how they affect the learning process. In order to benefit from the knowledge gleaned in our survey, this model could be used to identify more closely learners needs required outside content areas. Biggs proposes three sets of variables to be addressed: the learning environment and student characteristics (*presage*); students’ approach to learning (*process*); and learning outcomes (*product*).

Studies have shown that students’ *presage factors* (prior knowledge, academic ability, personality) influence greatly their ability towards ‘academic success’. Additionally, their perceptions have a great impact both on their hard (academic achievement) and soft (satisfaction, development of key skills) learning outcomes. This model suggests that personal and situational factors cause a student to employ a particular method to

learning, which then controls the types of outcomes attained (Lizzio et al., 2002). *Process factors* include students' approach to learning; eg. A 'deep' approach to learning is described as attempting to create understanding by applying and comparing ideas whereas 'surface' learning memorizes and repeats information learned without trying to integrate information (ibid). The third variable in the 3P model is *product factors*, which describe the learning outcomes (cognitive, affective or behavioural) which students develop from the learning process (ibid).

Noting the disparity in this study between an engineering institution and a broader-based curriculum university, it could be that these universities need to consider taking a closer look at how the classroom environment is affecting the students' progress towards what they understand to be the road to success. With the enormous amount of money spent on higher education in the UAE, all stakeholders are interested in making better student admissions and retention decisions.

Main Findings And Discussion



An online questionnaire was administered via the Institute's Institutional Research & Studies Office to all PI students across the disciplines. For the purpose of this paper, the results of only one of the main open-ended questions is being shared and discussed (Research Question # 9: What does 'academic success' mean to you?). A total of 174 of the 219 students who participated in the research answered the question. The student definitions of 'academic success' AS can be categorized into five main themes: *good grades/GPA, learning the content and for knowledge purposes, future career and job; personal development; and giving back to the community/country* (Fig.1).

Figure 1: Pi Student Definition Of Academic Success

At the PI, the two most recurring themes with the highest overall percentages are *future career and jobs* with 27% and *good grades and high GPA* (grade point average) with 26%. For instance, one student defines 'academic success' as "learning the necessary subjects that will be related to the future job". Another student adds, "to achieve the highest grades... 'academic success' is to have high grades in your courses." This is not surprising since PI students have guaranteed positions waiting for them at the end of their studies and are monetarily rewarded for the attainment of a high GPA at the end of each semester during their studies. Therefore, considering the high expectations placed on the students by the stakeholders, it is understandable why they associate job preparedness and high GPA with 'academic success'.

The third emerging theme from their answers is related to *learning and knowledge* with 25% of the students defining 'academic success' thusly. One student claims AS is, "knowledge aside from the grade. I can get a D in a course due to an unfortunate incident, but what matters is my understanding of the course." Another student reports AS is "...understands every word being said is relevant to the subject/course and being able to prove that on an exam paper." Learning for knowledge' sake matters to the PI students especially after joining the workplace. Their performances are assessed through several stages of professional development programs, and those who excel in them get promoted swiftly. This is consistent with the competitive nature of the engineering field in the job market where this criterion can distinguish the strong candidates from the weak ones.

Although hard to pinpoint, another recurrent theme was personal development which 20% of the respondents define as 'academic success'. In the words of one student, "'academic success' means that I have slotted myself into life as a successful and independent person who shall distribute his knowledge". Another student adds, "'academic success' means progress in life". These two definitions go beyond the grades and jobs to something more in line with Maslow's hierarchy of needs (Maslow, 1954) where self-actualization and self-development emerge after the basic needs, safety and security are met, a finding which validates the original hypothesis.

The last category that PI students relate to 'academic success' is *giving back* with 2% of the students defining it as the ultimate 'academic success'. In this category students mention how grateful they are to their country, their leaders and for all the opportunities provided for them. One student believes, "it means a lot to me. Make my country and my family especially my parents proud". Another one adds, "Working hard every day to achieve my goals and make my family and friends proud of me".

At ADU, the researchers, for convenience, administered hard copies of the questionnaire to the students. A total of 113 students out of the 128 students who completed the questionnaire answered the research question # 9. The team was able to categorize ADU students' definition of 'academic success' AS into the same five main themes: *future career and job; good grades/GPA, learning the content and for knowledge purpose, personal development; and giving back to the community/country.* (Fig.2)

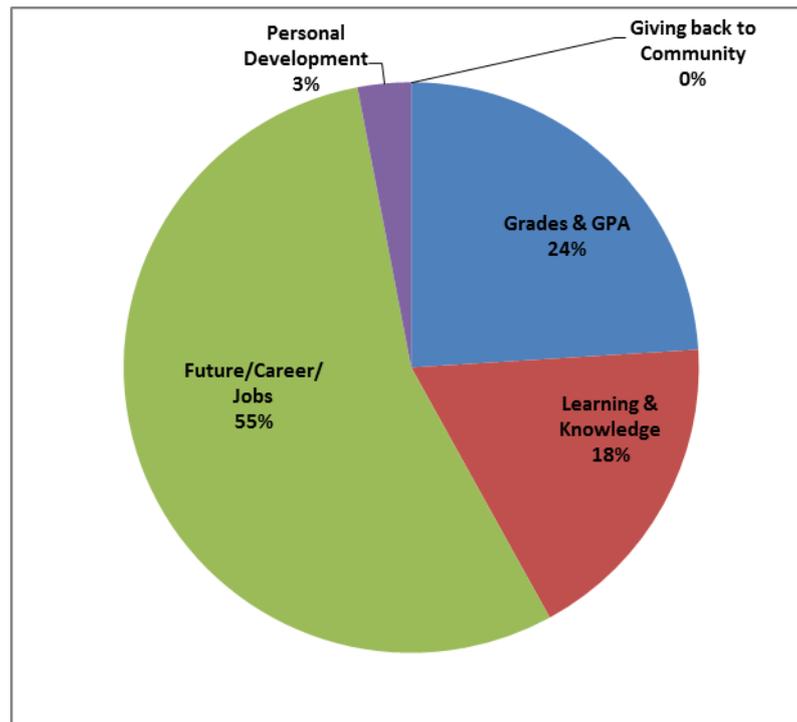


Figure 2: Adu Student Definition Of Academic Success

The results differed in comparison with the PI, and one of the categories (giving back to the community) did not exist at all. In the ADU survey, future career and jobs had the highest overall percentage, 55%. One of the students' definition of AS resonates, "it will grant me my future life and my job." Grades and GPA came second with 24% with answers such as "I graduate with good grades" and "it means to achieve higher than the average in a class" and learning and knowledge with 18% eliciting responses like "equipping graduates with skills and knowledge in order to confront all situations in life and care with ease" and "to get a huge amount of knowledge and to become different every day." As mentioned earlier, *giving back to the community* was not mentioned.

From their responses, the researchers observed the expressed need for the ADU students to secure a job in a competitive employment market. After graduating, there is no guarantee that they will find suitable jobs, unlike the PI graduates who have jobs waiting for them upon completion of their studies.

The final step of this study was to summarize and compare the responses of both groups. (Fig. 3)

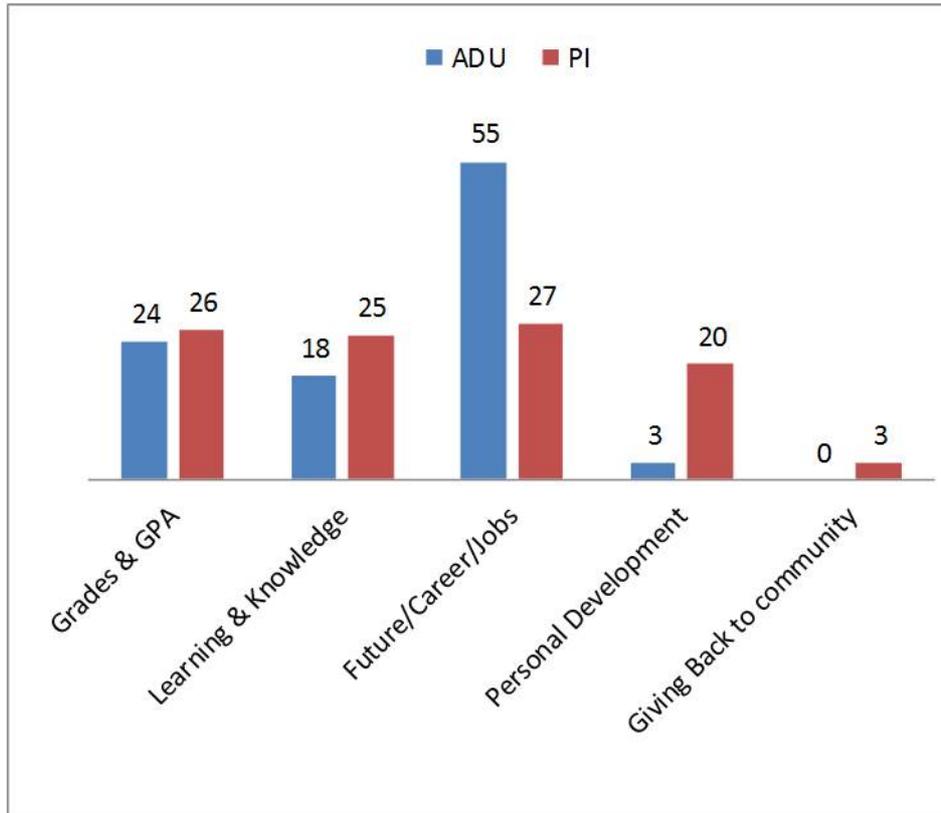


Figure 3: Comparison Between The Two Universities

Looking at the overall results and attempting to understand each group’s responses, it was possible to highlight the probable reasons for the differences in their definition of ‘academic success’. The major difference lies upon the job security bestowed upon the PI students while the ADU students have to compete for jobs with the Emiratis at large, in addition to competing with other university graduates and job seekers from other parts of the world.

Results from *grades and GPA* as well as *learning and knowledge* categories were not far apart from each other, 24% vs 26% and 18% vs 25% respectively. However, without either oversight or underplaying the importance for ADU students to have good GPA in order to keep their scholarship, it is also important to stress how a high GPA can provide them with a competitive edge in the job market. PI students, on the other hand, equate high GPA with the monetary rewards they receive at the end of each month in the form of stipend as well as the bonus they are entitled to at the end of each semester. As far as *personal development* is concerned, for many of the PI students, this is not only about getting a job. It is also about being able to challenge oneself and prove one’s worth as one alumna proclaims, “to put it simply, my job is the thrusting force that keeps me going.” The majority of the PI students are first generation engineers in their immediate and extended families, which carries great pride and a sense of accomplishment. ADU students’ concern for grades and degrees overshadows their concern for professional development as this doesn’t show on transcripts when applying for a job or a higher degree.

When it comes to *giving back to the community*, PI students demonstrate a greater need to give back to their home country. They connect the love for their country to the pride of identity as university educated citizens, as these elements are the results of their supportive environment. The alumna continues, "...and I am so proud to be serving my country in my own way." Then again, because ADU students have been expatriates all their lives, they might not have time or energy to spend on activities outside the university arena. In fact, many of them juggle their studies along with part/full-time jobs.

Conclusion

Both the Petroleum Institute and Abu Dhabi University settings are widely-known to be rigorous academic environments. In order to provide a productive learning environment, a better understanding of the factors that drive the students to achieve 'academic success' will facilitate a more beneficial learning community for all. As these opposing student opinions are identified, suitable intervention can be designed and tailored to match the students' key motivating factors for achieving their individual goals in the programs provided.

Based on data from our survey, it is clear that further research should be conducted to further expand our knowledge of these student perceptions. At this stage, we have identified the diversity of beliefs from two academically dissimilar institutions, but have not yet discovered what inspired these perceptions. A focus group, for example, might offer the opportunity to express the deeper feelings of these opinions and uncover reasons as to why the students hold these beliefs. With this opportunity for discussion on the topic, barriers to 'academic success' may be identified and possible solutions shared.

At a later stage, more expansive research is recommended, whereby the study might be replicated in other private and government-run universities, or possibly only in engineering institutions throughout the region.

References

- Bandura A. (1986). *Social Foundations of Thought and Action: A Social Cognitive Theory*. Englewood Cliffs, NJ: Prentice-Hall
- Center for Strategic and International Studies Middle East Program. (2013) *Changing the Meaning of Success: Young People and Employment in the GCC. Gulf Roundtable Series*. Washington DC, USA.
- Crede, M., Kuncel, N. (2008). Study Habits, Skills, and Attitudes; The Third Pillar Supporting Collegiate Academic Performance. *Perspectives on Psychological Science*. Vol. 3(6).
- Dollinger, S. J., Matyja, M. A., Huber, J.L. (2008). Which factors best account for Academic Success: Those which college students can control or those that they cannot? *Journal of Research in Personality*. 42:872-885.
- Dornyei, Z., (2005). *The Psychology of the Language Learner*. London: Lawrence Erlbaum Associates
- Engin, M. & McKeown, K. (2012). Cultural Influences on motivational issues in students and their goals for studying at university. *Learning and Teaching in Higher Education: Gulf Perspectives*. 9(1). <http://ithe.zu.ac.ae>
- Findlow, S. (2006). Higher education and linguistic dualism in the Arab Gulf. *British Journal of Sociology of Education*. Vol.27 (1). pp. 19-36.
- Gardner, H. (1985). *Social Psychology and Second Language Learning*.
- Hamilton, R & Ghatala, E. (1996). *Learning and Instruction*. Mc.Graw Hill. New York.
- Jacobi, M. (1991). Mentoring and Undergraduate Academic Success: A Literature Review. *Review of Educational Research*. 61 (4): 505-532.
- Lizzio, A., Wilson, K., Simons, R. (2002). University Students' Perceptions of the Learning Environment and Academic Outcomes: implications for theory and practice. *Studies in Higher Education*. 27 (1) 27-52.
- Maslow, A., (1954). *Motivation and Personality*. NY. Harper
- McGroarty, M. (2001) *Situating second language motivation*. In Z. Dornyei & R. Schmidt (Eds). *Motivation and Second Language Acquisition*. (pp. 69-90). Honolulu, H. University of Hawaii Press.
- Ushioda, E. (2006), Language Motivation in a Reconfigured Europe: Access, Identity, Autonomy. *Journal of Multilingual & Multicultural Development*. Vol. 27 (2).
- Moos, R. H. (1979). *Evaluating Educational Environments*. San Francisco: Jossey-Bass Publishers.

Schneider, B., Lee, Y., (1990), A Model for Academic Success: The School and Home Environment of East Asian Students. *Anthropology & Education Quarterly*. Vol. 21 (4): 358-377.

Skehan, P., (2003). Task based instruction. *Language Teaching*. 36(1). pp. 1-14.

Contact emails sfahmi@pi.ac.ae ahassan@pi.ac.ae ceide@pi.ac.ae