

The Impact of Motivation on the Academic Performance of University Students

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Abstract: This study evaluates how motivation influences the academic performances of university students. The sample includes 400 higher education students attending different universities in Saudi Arabia. The questionnaire was the data gathering method that was chosen by the researcher to complete this study. The study reveals that both intrinsic and extrinsic motivations positively impact the academic performance of students. Academic performance increased by a percentage increase of between 23% and 34 %. Overall, the model showed a significant jump ($p < 0,05$). The researcher found that the individual elements associated with extrinsic motivation -- rejection of alternative options: increase by 17%; career and qualifications: increase by 9%; social enjoyment: increase by 7%; social pressure: increase by 4%. The researcher also found that both intrinsic and extrinsic motivations are critical elements in the academic success of students and student's performances that tend to consistently fluctuate between good and average/poor. Their performance seems to be guided by the presence of an external reward. Further studies are needed to determine if intrinsically motivated students can be further motivated.

Keywords: University Students, Higher Education, Saudi Arabia

أثر التحفيز على الأداء الأكاديمي لطلبة الجامعة

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كلية العلوم والآداب ببلجرشي || جامعة الباحة || المملكة العربية السعودية

المستخلص: تقيم هذه الدراسة كيف يؤثر الدافع على الأداء الأكاديمي لطلاب الجامعة. تضمنت العينة 400 طالب وطالبة تعليم عالي يدرسون في جامعات مختلفة في المملكة العربية السعودية. الاستبانة هي طريقة جمع البيانات التي اختارها الباحث لاستكمال هذه الدراسة. تكشف الدراسة أن كلا من الدوافع الجوهرية والخارجية تؤثر بشكل إيجابي على الأداء الأكاديمي للطلاب. زاد الأداء الأكاديمي بنسبة تتراوح بين 23% و 34%. بشكل عام، أظهر النموذج قفزة كبيرة ($p < 0,05$) وجد الباحث أن العناصر الفردية المرتبطة بالدوافع الخارجية - رفض الخيارات البديلة: زيادة بنسبة 17%؛ المهنة والمؤهلات: زيادة بنسبة 9%؛ التمتع الاجتماعي: زيادة بنسبة 7%؛ الضغط الاجتماعي: زيادة بنسبة 4% كما وجد الباحث إن كلا من الدوافع الداخلية والخارجية هي عناصر حاسمة في النجاح الأكاديمي للطلاب ويميل أداء الطلاب إلى التقلب المستمر بين الجيد والمتوسط/الضعيف. يبدو أن أداؤهم يسترشد بوجود مكافأة خارجية. هناك حاجة إلى مزيد من الدراسات لتحديد ما إذا كان يمكن تحفيز الطلاب ذوي الدوافع الذاتية بشكل أكبر.

الكلمات المفتاحية: الطلبة الجامعيون، الجامعات، التعليم العالي، السعودية.

1. Introduction and Literature Review

A relatively young country, the Kingdom of Saudi Arabia boasts an enviable record of having afforded its citizens a continuously expanding educational system. Upon its founding in 1932 by Abdulaziz bin Saud, formal education was only accessible to affluent families residing in major cities. Today, in Saudi Arabia, the education system boasts a variety of educational institutions: 24 public universities, eight private universities, an incredible 25,000 other schools, in addition to a large number of colleges and technical institutes. Then, in 1964, a historic event took place: the inaugural government-funded all-girls school. Today, in the short space of half a century, 50% of the 5 million students within the educational institutions across the country are females (Information Office of the Royal Embassy of Saudi Arabia, Washington D.C., 2013).

Statement of the Problem

In Saudi Arabia today, as with many other countries, universities are a vital cog in the education wheel. But, as with many countries, higher education in Saudi Arabia is undergoing a telling transformation. How so? You may ask. There has been a change in approach to educating and the value it is now perceived to have. The value that was placed upon education in the past half-century or so has grown even more. Today, with the ever-increasing knowledge-based society, universities and the graduates that they output each year are of greater value to the world than ever before. Universities thus become important centers as they are the centers from where students can and do learn and hone new skills and abilities and garner new stores of knowledge. With the onset of the fourth industrial revolution and the commonly styled, creative economy, significant changes have been brought to the labor market and the education system, specifically at the university level, in Saudi Arabia and many, if not all, European countries.

As the researcher has been pointed out, there have been a few studies investigating the impact of motivation on the academic performance of university students in the Kingdom of Saudi Arabia. However, no studies have been undertaken in the higher education programs so far, and no analyses have been conducted to investigate motivation on the academic performance in public and private higher education institutes in Saudi Arabia, particularly from the perspective of the students.

This research is an attempt to explore and evaluate the impact of motivation on universities students performance, as well as to find out students' perceptions about the motivation that teachers use inside and outside the classroom in Saudi Arabia universities.

This study is an attempt to answer the following questions:

- 1- How motivation influences the academic performances of university students in Saudi Arabia ?
- 2- What is the relationship between students' motivation and performance in the Saudi Arabia universities?

Purposes of the Study

This study aimed at:

- 1- Identifying motivation influences on the academic performances of university students in Saudi Arabia.
- 2- Analyzing the relationship between students' motivation and performance in the Saudi Arabia universities.

Limitations of the study

The study is restricted to exploring and evaluating the impact of motivation on universities students performance, as well as to find out students' perceptions about the motivation that teachers use inside and outside the classroom in Saudi Arabia universities. As perceived by students from several universities and programs in Saudi Arabia

Time and Place limitations: The study was conducted in the first semester for the academic year 2019/ 2020 in several universities and programs in Saudi Arabia.

Previous Studies

Contemporary advanced societies, or as they are also commonly referred to, learning or knowledge societies, have the education question as a top priority because the utilization of human capital necessitates significant and varied investments in humanity.

Education is "an investment that will in the future bring the individual revenue, in the form of increased earnings as a reward for greater knowledge and skills, and therefore higher labor productivity and technological progress as a contribution to society" (Rheinberg, 2018). Becker believes that human capital falls into two categories, the first, specific and utilized within an organization or business, the other that is more general and can be put to use in a variety of spheres within the working world.

The importance of higher university education has been outlined, so it becomes evident that the motivation of students is of utmost importance, as their academic performance will have a significant bearing on their professional lives. After viewing this study, three things will become apparent to stakeholders in education. A discovery of how students feel about the education system. The discovery of what the students believe facilitates learning, and third, what hinders it. This critical information will aid educators with predictive evaluation. They will have the tools to predict a decline and implement corrective measures (Pintrich, 2003). Maslow (1987) has found, through investigation, which with growth comes that a corresponding reduction in passion for learning as learning becomes less about pleasure and more of a compulsory activity; he concludes this to be the reason for students dropping out of school before their graduation.

Motivation is essential in encouraging a desire to learn. Many have conducted studies on the correlation between motivation and the performance of students. From such studies, a variety of views on student motivation have been forward. Lumsden (1994) conducted an evaluative study of the correlation between participation in education and their corresponding motivation.

Wigfield (2000), saw motivation as a beneficial aid to the learner. Ames and Carole (1992) forwarded that student motivation comes about through determined effort and a deep-seated desire to learn. The majority of motivation theorists believe that being motivated is a key in the execution of all learned responses; even more telling, they forward that learned behavior will never happen once motivation is absent. Another view supplied by Ryan (2000) that student motivation is the willingness, preference, and obligation of the student to engage and be successful in education and learning.

According to Rheinberg & Engeser (2018), there is the general assumption that motivation has two basic types: intrinsic and extrinsic. Intrinsic motivation (IM) is behavior that is innately fulfilling and gratifying, not governed by nature; in other words, it is not affected by any agent separated from it. In essence, the result and the route are similar. An example is a child who plays outdoors because it is enjoyable and gives inner satisfaction. Conversely, extrinsic motivation (EM) is very dependent. In extrinsic motivation, the carrying out of the desired action is dependent on an outside stimulus that may have no connection to it.

Extrinsic motivation is contributory by nature; it becomes of use in the desire to achieve something else. For example, a student might arrive at school early to avoid detention or fake sickness to avoid an exam. Extrinsic motivation is multifaceted and changes from absolutely external (for instance, arrive early to avoid detention) to absolutely internal (recycling because one sees oneself as a conscientiously responsible member of society). (Zeigler, 2016).

Intrinsically motivated students are naturally more enthused, self-motivated, have a greater desire for challenges, and derive more pleasure from their engagement in the education and learning process. Extrinsically motivated students are the exact opposite; they abhor doing assignments, believe that they are being forced against their will to learn, and they expend little effort in their quest to get the best results. In seeking to gain the most from the learning process, intrinsically motivated students usually employ approaches that call for a determined effort. They, in turn, delve deeper into the information disseminated. Tohidi, (2006) forwarded that intrinsically motivated students confronted with diverse intellectual pieces make better use of logical information-gathering and decision-making approaches, but no so of those students who were extrinsically motivated. That is not the only difference, students that are motivated intrinsically gravitate more towards the more demanding tasks. In contrast, the extrinsically oriented students were quite happy to deal with assignments that provided little or no intellectual challenge. Ryan (2000) proposes that to motivate the extrinsic student, some form of public recognition for their academic attainments is necessary.

This recognition, he believes, can be accomplished through the use of reward and punishment for example, awarding sweets and stickers for good achievement and withholding privileges such as their recess break for poor results.

Motivation is a mental state that drives activities and human actions. The source of intrinsic and extrinsic motivation may be discovered while observing participants inside the learning environment or the workspace. There have been numerous studies to discover factors that give rise to intrinsic and extrinsic motivation in students. Ames (1988) purports that the desire to learn is an acquired trait developed through circumstances to which one was exposed. This desire becomes inculcated by several factors: the modeling of specific behavior, the imparting of the acceptable standards of behavior, direct teaching, and methods of socialization used by associates, family members, and educational instructors. Parents and educators have a vital part to play in the type of motivation developed in children.

There are several ways that parents contribute to the development of children. These include, but are not limited to: becoming involved in the daily activities of their children -- example doing art and craft, reading lessons, assisting with homework, visiting the zoo, etc.) -- and actively participating in their academic life -- example attending parents days activities, playing the volunteer role in school undertakings, aiding in fundraising ventures, etc. In certain regions and states, parents are even able to decide which institutions their children attend. Moreover, they are influencers needed to hold educational institutions accountable for the learning of their charges. They can exercise their right to positively influence schools to improve their academic output and become leaders within the institutions, thereby influencing policy decisions. This influence can be done formally (by getting elected to school boards, becoming advisors to schools, organizing an effectively run Parents Association) or informally (by interacting with school leaders, staff members, and other parents). Parents are the first fountain of information from which children will drink. They are privileged to introduce their children to the world: help formulate their view of it by answering their many inquiries, introduce them to different aspects or spheres of life through the relating of stories, attending religious services, etc. It is thus that the attitude of children towards education and life develops. And if they have cultivated inner confidence, a realization of their worth, and needed competencies, they will be equipped to face and deal with both challenges and victories. (Wiest, 2001)

Inside the learning institution, the teacher plays a critical, impactful, and invaluable role in developing student attitudes. Noels, (1999) says the teacher's self-view, teaching style, and communicated expectations heavily impact the student's attitude towards learning. Henderlong, (2002) shares somewhat similar views, as he believes that many students will try to learn if their teacher expects them to. Teachers should recognize they are powerful active agents of social change who can influence or direct motivation.

Conclusively, as far as predictors of academic pursuits go, motivational factors are some of the best. Therefore, this study aims to investigate how intrinsic and extrinsic motivational factors impact academic performance. The intrinsically motivated student will likely maintain a high consistency level; the extrinsically motivated counterpart will likely fluctuate between good and poor performances.

2. Research Methodology

2.1. Sample

A sample of 400 students from several universities and programs in Saudi Arabia was the basis for our study. Students will respond to questions about what motivates them to study at the university level. They will also indicate if they find additional sources of motivation from their university experiences. Both genders were a part of the process: 82% males and 18% females respectively, both with an average age of 20. Statistical purpose analysis of variance will be facilitated by SPSS version 17.

2.2. Instrumentation and Measurement

The University Student Motivation and Satisfaction Questionnaire version 2 (TUSMSQ2), an instrument of measurement of student motivation that was developed by Neil in 2004 will be used. This instrument consists of 30-items that measure both the intrinsic and extrinsic motivation of the participants. The measurement instrument comprises two intrinsic motivators -- Self-exploration and Altruism -- and four extrinsic motivators -- rejection of alternative options, career and qualifications, social enjoyment, and social pressure. The questions posed were based on the 5-point Linkert scale. Each item came with a rating scale of 1 to 5 where '1' represents "Very False" and '5' represents "Very True". Students rated themselves based on this scale.

The items below outline the key to the sources of motivation mentioned in the survey.

- Rejection of Alternative options (Extrinsic) 1, 7,13,19,25
- Self-exploration (Intrinsic) 2, 8,14,20,26
- Career and Qualifications (Extrinsic) 3, 9,15,21,27
- Social enjoyment (Extrinsic) 4, 10,16,22,28
- Social Pressure (Extrinsic) 5, 11, 17, 23, 29
- Altruism (Intrinsic) 6, 12,18,24,30

The key highlights that every source of motivation was given due consideration during the survey.

2.3. Procedure

The questionnaires were distributed randomly among the 400 students in different universities who were pursuing different programs across different semesters; questionnaires were collected upon

completion. The data analysis was facilitated using SPSS for Windows (version 17.0) to obtain accurate analysis and results. This analysis was inclusive of regression of variance analysis (ANOVA).

3. Result and Discussion

With the discovery of motivation as having a significant impact on education, several changes came about -- both as a whole and as separate individual elements -- resulting from dramatic shifts in society. These changes were impacting students within the sector. The period of social and economic change that followed the year 1989 resulted in changes in education and production systems. (Machonin, Tuček, et al., 1996; Matějů and Večerník, 2015).

There have been fast-moving developments in Science and education and the service sphere. Many universities, both public and private, have been established with their core focus being the attainment of the desired social, economic, and leadership disciplines; it is these institutions at which many young persons have been privileged to become educated. In contrast, no privately-owned technical university got established.

The table below outlines the results from the question of how motivation has impacted their academics.

Table (1) Student responses to questions about their motivation and its impact on their academic performance

| Variables | Coefficient Beta | Std. Error | t.value | Sig |
|---------------------------------|------------------|------------|---------|------|
| Constant | 1.075 | .630 | 3.076 | .078 |
| Rejection of Alternative Option | 0.155 | .273 | 2.018 | .416 |
| Career Qualification | .066 | .233 | .378 | .815 |
| Social Enjoyment | 0.058 | .457 | .288 | .956 |
| Social Pressure | 0.042 | .382 | .240 | .988 |
| Self-Exploration | 0.112 | .338 | .540 | .783 |
| Altrusim | 0.123 | .260 | .853 | .577 |
| R-Square | .90 | | | |
| F-Statistic | 17.017 | | | |
| Significant | .009 | | | |

Table 1 reports the results of regression analyses with the values of R-Square=0.90 and the F-statistics= 17.017.

From the results, we see a significant model ($p < .10$) and that the relationship between independent and dependent variables is strong. Notwithstanding, when looked at from an individual perspective, all variables prove to be significant ($p > .05$). The regression coefficient for the Rejection Alternative Option is 0.155; this is suggestive of employee performance which is sensitive to Rejection

Alternative Option and rises by 17% as a result. The regression coefficient for Career Qualification is 0.066, which again is suggestive of employee performance being sensitive to Career Qualification and rises by 08% as a result. The regression coefficient for Social Enjoyment is 0.058, which is also suggestive of employee performance being sensitive to Social Enjoyment and results in a rise of 07% thereby. The regression coefficient for Social Pressure is 0.042, again suggestive of the fact that employee performance is sensitive to Social Pressure and results in a notable rise of 03% thereby. The regression coefficient for Self-Exploration is 0.112, which also suggests that employee performance is sensitive to Self-Exploration and has a resulting rise of 10% as a result.

The regression coefficient for Altruism is 0.123, which suggests that employee performance is sensitive to Social Pressure and thus rises by 11% as a result of it. Overall, the model is remarkable ($p < .10$); it shows that each independent variable is of significant importance to the student's performance, notwithstanding the varying degrees of importance. The results highlight a comprehension of the performance of students through the two-fold elements of extrinsic and intrinsic motivation.

Table (2) The students' performance

| Variables | Coefficient Beta | Std. Error | t.value | Sig |
|----------------------|------------------|------------|---------|------|
| Constant | 1.085 | .467 | 3.918 | .016 |
| Extrinsic Motivation | 0.448 | .279 | 3.050 | .073 |
| Intrinsic Motivation | .328 | .229 | 3.008 | .077 |
| R-Square | 0.88 | | | |
| F-Statistic | 35.676 | | | |
| Significant | .000 | | | |

Table 2 highlights the outcome of the regression analysis with the values of R-Square=0.88 and the F-statistics=35.676. The resulting model is notable ($p < .05$) and demonstrates a strong link between independent and dependent variables. However, individually, both variables prove to be quite insignificant ($p < .05$). The resulting regression coefficient for extrinsic motivation is 0.348; this is suggestive of a sensitivity of employee performance towards extrinsic motivation which results in its rise by 34%. On the other hand, the regression coefficient of intrinsic motivation is 0.328 which is a notable rise in this model, which means that it decreases employee performance by 23%. Overall, the model is notable ($p < .05$) and indicates the significance of both independent variables, (although of varying degrees) to the output of students.

4. Discussion

This is what was discovered from the study: The rejection of other educational options, occupational choice, academic qualifications, and negative social pressure inhibits students' academic

output. Whereas, intrinsic motivation resulting from an altruistic nature and the exploration of self encourages far better academic output. A second discovery was that the resulting impact of both intrinsic and extrinsic motivation on students' output was an increase of 23% and 34% respectively. The T-value calculated from both tables revealed that both intrinsic and extrinsic motivation together significantly impacts students' academic performance; thus, leaving an overall significant model.

The study also reveals a high R-square of 90%, thus showing a strong correlation between motivation and performance. Intrinsic motivation accounted for a 34% rise in performance and extrinsic factors accounted for a 23% rise.

The students that were selected come from varying social, economic, religious, and political backgrounds, have diverse strengths, talents, and dreams, and have had different experiences that have contributed to their gained knowledge; these differences have resulted in different levels of motivation for learning. Some have benefited from enhanced skills set due to effective early schooling, and other environmental factors. This, in no way, invalidates the view put forth by (Masitsa, 2008) that motivation is an essential prerequisite to good academic performance. This motivation can also come from the teacher, as effective teaching and learning are also hinged on the teacher's capacity to generate interest in the subject that he/she teaches. Notwithstanding, according to (Ericksen, 1978) performance is also impacted by outside influences that occur during periods of study. There is no more effective method of assessing students' motivation, outside of asking them, hence, using the intrinsic and extrinsic motivation questionnaire as a survey tool.

5. Conclusion and Recommendations

The purpose of this study was to analyze the impact of motivation on the academic performance of students. At the end of the study, it is concluded that there is a direct relationship between students' motivation and performance. The indications are that motivated students perform better and that good-performing students are more motivated makes this relationship a reciprocal one.

The study revealed an R-square of 90%, thus substantiating the strong correlation between different levels of motivation and academic prowess. Likewise, the T-value also points to the same. Both intrinsic and extrinsic motivation were found to have resulted in increased performances of 34% and 23% respectively. These results were found for the individual elements associated with intrinsic motivation -- self-exploration: increase by 10%; altruism: increase by 12%.

These results were found for the individual elements associated with extrinsic motivation -- rejection of alternative options: increase by 17%; career and qualifications: increase by 9%; social enjoyment: increase by 7%; social pressure: increase by 4%. Sansone (1992). (1997) This result is corroborated by the views of both Vansteenkiste (2005) and Kinney (2012) who linked a high level of motivation and engaged learning with the reduction in attrition rates and contrastingly higher levels of

performance by students. It is thus fair to conclude, from our findings that those students who are intrinsically motivated outperform those who are motivated extrinsically. There are instances where extrinsically motivated students perform well to obtain rewards, but this level of performance is hardly ever maintained for long periods, and in fact, their performances tend to consistently fluctuate between good and average/poor. Their performance seems to be guided by the presence of an external reward.

In contrast, the intrinsically motivated student seeks to perform at a consistently high level for self-gratification and out of a desire to learn. These students have a strong love for learning, leading to good, consistent performances. The evidence suggests that intrinsic motivation has a positive impact on academic performance. The scores and consistency are better. On the other hand, extrinsic motivation also produces increased performance (though not as good as intrinsic motivation). However, consistency in performance is not maintained as the motivational reward is withdrawn or becomes ineffective. Further studies are needed to determine if intrinsically motivated students can be further motivated.

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