

Enhancing Students' Academic Performance in an Online Distance Learning Institution: The Roles of Extrinsic Motivation, Intrinsic Motivation, Self-Efficacy and Time Management

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Introduction

- Academic success is deemed very important amongst students who pursue their higher education.
- A higher education institution's performance will usually be measured by its retention rates and the students' results.
- Therefore, if the students' failure rate is too high, eventually it will affect the image and the performance of the higher education institution.

Purpose of the Study

- The main purpose of this study is to look at how intrinsic motivation, extrinsic motivation, self efficacy and time management influence students' performance and therefore offers a perspective of how these factors influence the performance of the students in their studies.

Research Problem

- The World Wide Web technology has influenced and changed how people learn, socialize and work (Bonk & King, 1998).
- (Jung & Rha, 2000; Olson & Wisner, 2002), many adults are choosing online distance learning to fulfill their learning needs because of its system of delivery. The effectiveness of online distance learning has been explained in many studies.
- However, the increasing numbers of learner failure rates are alarming in online distance learning (Cigdem, 2010; Adebayo, 2015; Maysoon, 2016; Nzewi, 2016).

Research Questions:

- Does intrinsic motivation has influence on student performance?
- Does extrinsic motivation has influence on student performance?
- Does self-efficacy has influence on student performance?
- Does proper time management has influence on student performance?

Research Objectives:

- To determine whether intrinsic motivation have a positive and significant influence on students' performance.
- To determine whether extrinsic motivation have a positive and significant influence on students' performance.
- To determine whether self-efficacy have a positive and significant influence on students' performance.
- To determine whether time management have a positive and significant influence on students' performance.

Literature Review

Underpinning Theory:

- Explains intrinsic–extrinsic motivation in detail is self-determination theory (SDT, Deci & Ryan, 1985).
- SDT suggests that an individual has an inner need which is autonomous and thus is capable and associated with their environment.
- Highlights that if the conditions of the environment accommodates a person's autonomy, then a more autonomous appearance of motivation. (Ryan & Deci, 2000).

Extrinsic Motivation

- Lepper (1988) mentioned that motivation is where students get rewards and avoids punishment which is external to the tasks such as their lecturer's approval or grades.
- This view was supported by Dev, (1997, suggests that students who are extrinsically motivated are more likely to participate in learning to get a reward or to escape from punishment.

Intrinsic Motivation

- Intrinsic motivation is a very powerful source in our lives and can often produce fast results (Gallo and Ronaldo, 2011).
- Students who have strong intrinsic motivation usually seek success for the sake of achieving it. In reality, if they believe they are forced to accomplish success in activities in which they are already interested in, their motivation level or inner interest is decreased.

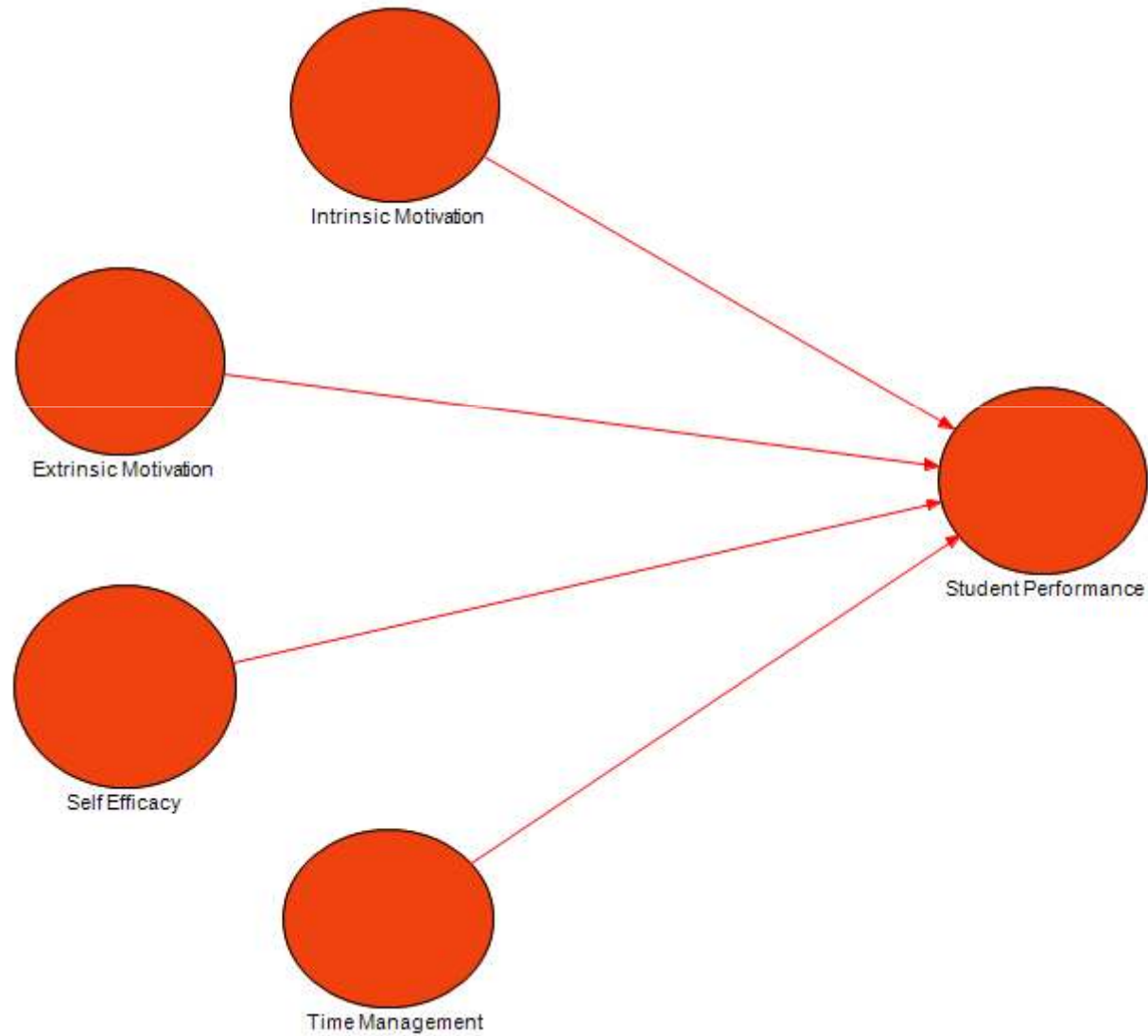
Self-Efficacy

- Bandura (1986) defined self efficacy as the personal confidence in a person and the capability to complete specific task successfully. Self-efficacy beliefs are important influential elements to determine an individual's ability to use effort on tasks and continuously deal with difficulties.
- A person with a high self-efficacy will put more effort to complete given tasks and never give up although the tasks can be difficult. In contradiction, individuals with a low self-efficacy can easily give up most of the time.

Time Management

- Time management can be defined by how an individual organizes, schedules and budgets his or her time in order to generate effective work and increase productivity. It is based on priority – how an individual allocates and distributes his time towards competing tasks.
- Gerald (2002) described time management as a principle, skills, tools, systems and practices that are combined in an effort to ensure that the individual to achieve better time value, which will eventually improve the quality of life.

Research Model



Research Hypotheses

- ***H1***: There is a positive and significant relationship between extrinsic motivation and students' performance.
- ***H2***: There is a positive and significant relationship between intrinsic motivation and students' performance.
- ***H3***: There is a positive and significant relationship between self-efficacy and students' performance.
- ***H4***: There is a positive and significant relationship between time management and students' performance.

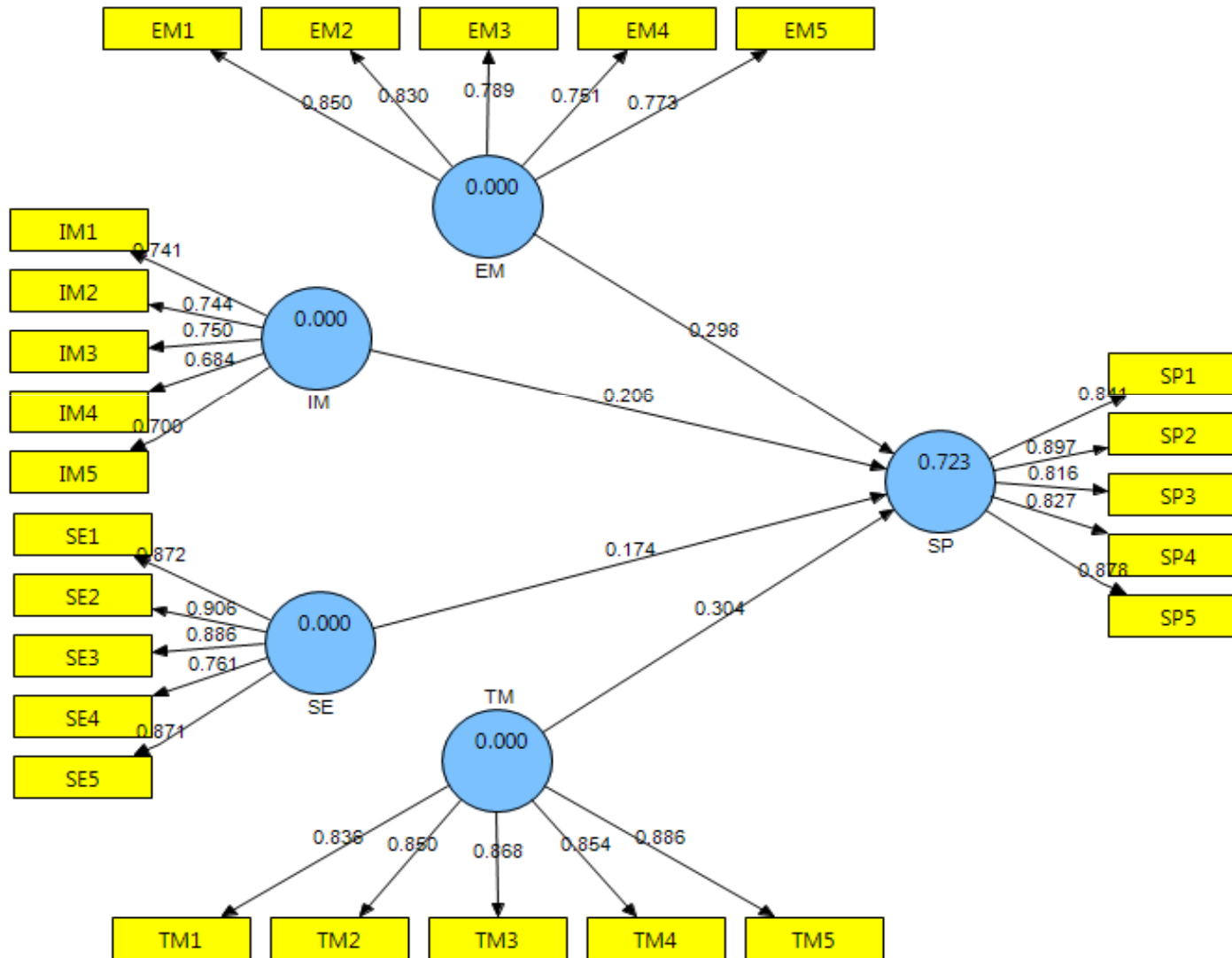
Methodology

- Total of 25 observed variables constitute the measurement of exogenous independent variables of intrinsic motivation (5 items), extrinsic motivation (5 items), self-efficacy (5 items) and time management (5 items). The endogenous variable of a student's performance consists of 5 items.
- The scaling applied on the variables in this study is the 5-point Likert scale of 1-strongly disagree, 2-disagree, 3-neutral, 4-agree and 5-strongly agree.

Sample

- A total of 300 OUM students were requested to complete a questionnaire that contained measures of the construct. Out of the 300 distributed questionnaires, 226 were returned. This made up the response rate of 75.3%.
- In view of that, the rate of response is sufficient for SEM analysis. The Mahalanobis distance was determined based on a total of 25 observed variables. The test conducted identified 16 cases with Mahalanobis value above the critical value.
- The Mahalanobis analysis was successful in indentifying the multivariate outliers which were deleted permanently, leaving 210 datasets to be used for further analysis.

Data Analysis



Construct Validity & Reliability

	AVE	AVE sqrt	Composite Reliability	R Square	Cronbach Alpha	Communality
EM	0.639	0.799	0.898	0.000	0.859	0.639
IM	0.525	0.724	0.846	0.000	0.779	0.525
SE	0.741	0.861	0.934	0.000	0.911	0.741
SP	0.727	0.852	0.930	0.723	0.906	0.727
TM	0.738	0.859	0.934	0.000	0.911	0.738

Variable Correlation Matrix based on AVE Square Root

	EM	IM	SE	SP	TM
EM	0.799				
IM	0.551	0.724			
SE	0.636	0.610	0.861		
SP	0.746	0.664	0.723	0.852	
TM	0.736	0.618	0.769	0.784	0.859

Cross Loading

	EM	IM	SE	SP	TM
EM1	0.850	0.537	0.560	0.648	0.655
EM2	0.830	0.435	0.625	0.673	0.643
EM3	0.789	0.376	0.489	0.505	0.519
EM4	0.751	0.402	0.399	0.535	0.505
EM5	0.773	0.435	0.443	0.594	0.596
IM1	0.441	0.741	0.494	0.528	0.478
IM2	0.356	0.744	0.409	0.446	0.461
IM3	0.306	0.750	0.408	0.420	0.310
IM4	0.223	0.684	0.333	0.304	0.294
IM5	0.549	0.700	0.501	0.599	0.587
SE1	0.551	0.548	0.872	0.623	0.687
SE2	0.548	0.505	0.906	0.642	0.671
SE3	0.539	0.485	0.886	0.655	0.661
SE4	0.529	0.543	0.761	0.548	0.606
SE5	0.573	0.554	0.871	0.637	0.683
SP1	0.634	0.566	0.610	0.841	0.679
SP2	0.659	0.613	0.664	0.897	0.744
SP3	0.597	0.549	0.501	0.816	0.594
SP4	0.614	0.502	0.659	0.827	0.642
SP5	0.670	0.595	0.639	0.878	0.674
TM1	0.616	0.559	0.682	0.682	0.836
TM2	0.596	0.535	0.664	0.628	0.850
TM3	0.670	0.488	0.626	0.692	0.868
TM4	0.614	0.502	0.617	0.642	0.854
TM5	0.659	0.569	0.712	0.718	0.886

Path Coefficient & T-Value

	Path Coefficient	T-Value
EM---->SP	0.298	6.088
IM---->SP	0.206	3.852
SE---->SP	0.174	3.344
TM---->SP	0.304	5.022

Goodness of Fit

$$\text{GoF} = \sqrt{\text{Avg Communalities} \times \text{Avg } R^2}$$

- With regard to the classification of R^2 effect sizes by (Cohen, 1988) and adopting the 0.5 cut-off value for communalities (Fornell & Larcker, 1981), GoF criteria for small, medium, and large effect sizes are 0.1, 0.25 and 0.36 respectively. The computed GoF for model was 0.312 signifying that there is good fit to the data.

Hypotheses Result

Hypothesize Relationship	Path Coefficient	T-Value	Conclusion
H1: There is a positive and significant relationship between extrinsic motivation and student performance.	0.298	6.088	Supported
H2: There is a positive and significant relationship between intrinsic motivation and student performance.	0.206	3.852	Supported
H3: There is a positive and significant relationship between self-efficacy and student performance.	0.174	3.344	Supported
H4: There is a positive and significant relationship between time management and student performance.	0.304	5.022	Supported

Discussion & Conclusion

- The findings of this study suggested that a student's performance in online distance learning institutions can be strengthened and enhanced by emphasizing the factors that can boost intrinsic motivation, extrinsic motivation, self efficacy and time management.

Discussion & Conclusion

- Conversely, online distance learning students' performance can be reinforced and enhanced by increasing the level of intrinsic motivation, extrinsic motivation, self efficacy and time management. Ultimately, students' performance in online distance learning should play an important role in reducing the university students' attrition rate.

Thank you