SMART

Journal of Business Management Studies

(A Professional, Refereed, International and Indexed Journal)

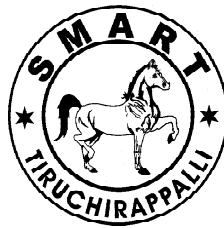**Professor MURUGESAN SELVAM, M.Com, MBA, Ph.D, D.Litt**
Founder - Publisher and Chief Editor

UOH BUSINESS ADMINISTRATION COLLEGE STUDENTS' PERCEPTION OF THEIR LEARNING EXPERIENCES, FOR COMPETENCY BUILDING, THROUGH STUDENT-CENTERED, LEARNING APPROACH

Serhan Alshammari

Assistant Professor, College of Business Administration,
University of Hail, Kingdom of Saudi Arabia
dr.serhan1020@gmail.com

and

Ajay Singh*

Associate Professor, College of Business Administration, University of Hail,
Kingdom of Saudi Arabia

a.singh@uoh.edu.sa

Abstract

The study was conducted on undergraduate business students, at the College of Business Administration (CBA), at the University of Hail, Kingdom of Saudi Arabia. The Researchers attempted to determine, the perception of business stream students of their learning experiences, in building their competency and skills, by applying student centred learning approach. The factors considered, in the study, were Students' Learning Activities (SLA), Students' Learning Resources and Facilities (SLRF); UOH Proposed Teaching Practices (UPTP), Strategies for Students' Motivation for Learning (SSML) and Students' Learning Perception on Competency Building (SLPCB). The study identified the different aspects of students' perception of their learning experiences, by applying structural equation modelling (SEM). It also recommends particular areas of improvements and actions to their overall development.

Keywords: *Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA) and Structural Equation Modelling (SEM).*

JEL Code*: M1 and D83*

***** Corresponding Author

1. Introduction

Measuring teaching effectiveness, through students, become a useful tool to measure quality in higher educational institutions **(Al Kuwaiti and Subbarayalu, 2015; Alderman et al., 2012; Zerihun et al., 2012). Barrie et al. (2015)** identified three factors, namely, motivation, resources and assessment, to improve students' learning. The learning environment positively impacts students' learning and measures the quality of learning **(Jump and Jump, 2006; Zerihun et al., 2012). Nair et al., 2011** examined best practice areas and identified them for improvement of students. Educational institutions play a vital role in student engagement with the coursework and instructors, on the other hand, measure students' engagement strategies to develop them **(Meng and Jin, 2017).** The culture of students' feedback on the teaching quality has been in practice for long **(Delaney et al., 2010).Biggs (1999)** proposed a model, to deal with students' rating of their learning experiences about teaching, individual students' differences, and students' involvement in learning activities. Instructors can help students access various open resources and engage them to collaborate with a creative environment **(Kohout-Tailor and Sheaffer, 2020)**. Students' perception of power and autonomy (teacher-learner) directly affects their involvement, motivation, and learning **(O'Brien et al., 2020)**. Also, motivation is a more profound method of teaching and independent learning and it enhances learning quality **(Gulikers T.M. et al., 2006)**. Community-building strategies, design of the course, technology and time are important factors contributing to student learning **(Song et al., 2004)**. Technology plays a significant role in students' learning and interaction with their teachers, leading to quality learning **(Zerihun et al. 2012)**.

2. Review of Literature

Students' perception, concerning the teaching and learning process, is the most crucial element to measure teaching effectiveness for any institution **(Al Kuwaiti &Subbarayalu, 2015; Hamshireet al., 2017)**. Assessment For Learning (AFL) helps measure students' perception of their learning experiences **(Gibbs et al., 2003; Pat-El et al., 2013)**. **Devlin (2002)** examined students' perception of their learning, by using "Perceptions of Learning Environment Questionnaire (PLEQ)". **Jump & Jump (2006)** evaluated students' perception about their learning environment, through using a questionnaire, "Perceptions of Learning Environment Questionnaire (PLEQ ll)". **Delaney et al. (2010)**, in an online and campus-based survey on students' perception of teaching, identified 9-effective teaching characteristics. **Visser-Wijnveen, van der Rijst, and van Driel (2016)** developed "Student Perception of Research Integration Questionnaire (SPRIQ)", to determine the factors that students perceived, in research specific courses and considered the feedback of students' perceptions as a promising tool for teaching and learning. **Zerihun et al. (2012)** performed Exploratory Factor Analysis (EFA) on students' reflections of their learning experiences, by considering 24-items on the "Student Evaluation of Learning & Teaching Questionnaire (SELTQ)". Students perceive the instructors' teaching as influential when expressing themselves, both explicitly and implicitly, in the classroom **(O'Brien et al., 2020)**.**Nair et al. (2011)** delineated the strategies for students' engagement to enhance student engagement and further tried to improve them to increase students' satisfaction. **Bernaus Merce and Gardner (2001)** investigated 26 teaching strategies and found that majority of them were satisfied with course

design, motivation, compatibility with technologies and time management.

3. Statement of the Problem

The study had adopted two perspectives about learning, known as Behaviorism and Constructivism. Behaviorism is the most useful concept, for identifying the relationship between actions by students in the classroom. It follows the cognitive theory principles, based on students' reflection on teaching and thinking about improving teaching itself. The model of behavior learning primarily relies on respondent conditioning (classical) and operant conditioning. Teachers influence the students' behavior and thinking and seek fruitful changes in students' learning and positively or negatively affect their motivation (intrinsic or extrinsic). The operant conditioning **(Skinner, 1988)** results in new behaviors because of further consequences. The theory is applied to know the effect of influences on specific behaviors. The operant conditioning also describes the learning behavior of students in the classrooms. It is about engaging students in certain activities (like classwork, assignments, discussions etc.), making teaching attractive and reinforcing **(Rockmore, 2005)**.

4. Need of the Study

The study was based on students' perception of learning experiences, to improve teaching and learning in higher education. Students factors were identified as flexibility in learning and convenience **(Carter, 2013)**.

5. Objectives of the Study

1. To analyse the present scenario of students' learning activities at CBA, to maintain course learning outcomes, contributing to their academic and professional development.

2. To study the availability of Students' Learning Resources and Facilities at CBA, contributing to the students' competencies building.

3. To examine how CBA's proposed teaching practices, support students' learning and competency building by aligning with international academic practices.

4. To study how students' motivational strategies for learning is supporting their competency building.

5. To analyse the overall impact of students' learning activities, students learning resources & facilities, proposed teaching practices, and strategies for students' motivation on overall students' learning and competency building.

6. Hypotheses of the Study

H01: Students' learning activities have not significantly supported course learning outcomes and students' academic and professional development.

H02: Available students' learning resources and facilities at CBA did not significantly help to build student competencies.

H03: Proposed teaching practices have not significantly supported students' learning and competency development, aligning with international academic practices.

H04: Strategies for students' motivation for learning has not significantly supported students' competency building and learning.

H05: All the four factors like students' learning activities, students learning resources & facilities, proposed teaching practices, and strategies for the students' motivation, have not significantly supported overall students' learning and competency building.

7. Research Methodology

7.1 Sample Selection

The study considered 224 valid responses of male and female undergraduate business

stream students of the University of Hail, Saudi Arabia. Sample was selected from the Management, Management Information System (MIS), Accounting and Economic & Finance Department of the college.

7.2 Source of Data

The primary source of data was the responses of business stream students at the University of Hail, Kingdom of Saudi Arabia. The other sources were the past studies conducted on students' perception of learning experiences in higher education.

7.3 Period of Study

The data were collected from undergraduate students, over a period of four and a half months, starting from January 15 to May 15, 2020, during the spring semester.

7.4 Tools used in the study

The study developed a questionnaire, on the five-point Likert scale, with 27 items, to measure students' perception of their learning experiences **(Barrie et al., 2015)**. The pilot survey was conducted on thirty students and five instructors of different streams, to verify twenty-seven items in the questionnaire. The research used SEM, followed by CFA and EFA. The measurement model **(Figure-1)** comprised five constructs, with 24 variables, as three-variables dropped from the study after performing EFA.

8. Data Analysis

The study initially performed Exploratory Factor Analysis (EFA), on 27 items of 324 responses, using varimax rotation, which yielded five factors. The solution explained 69.87 percent of variance of the total variance in the correlation matrix. KMO measure of sample adequacy was 0.93, which was acceptable. The study removed three variables: SLA1, SLRF4 and UPTP1, due to lower commonalities score.

The study performed CFA and SEM, by using SPSS AMOS software. The analysis measured the model fit, with Chi-square goodness-of-fit and approximate fit indices **(Arbuckle, 2010; Piaw, 2013)**.

8.1 Confirmatory Factory Analysis (CFA)

The first order measurement model **(Figure-2)** demonstrated the significant model fit of Chi-square (at 0.01 significant level) to the degree of freedom (CMIN/DF) at 2.40, which was excellent and less than 3.00. The CMIN value, at less than two, was preferred, and between 2 to 5 would be acceptable. The approximate fit indices, Goodness of fit index (GFI = 0.869), Adjusted Goodness of fit index (AGFI = 0.837), Comparative fit index (CFI = 0.931), Normed fit index (NFI = 0.888), Relative fit index (RFI = 0.872), Incremental fit index (IFI = 0.931) and Tucker-Lewis fit index (TLI = 0.921), recorded values greater than 0.9, as displayed in the Table, to justify the model fit. The Root Mean Square Error of Approximation (RMSEA) value, at 0.066, was less than 0.08 and hence acceptable. The Standardized Root Mean Squared Residual S(RMR) value, at 0.070, was acceptable (should be < 0.08) and also confirmed the model fit. The RMR value, at less than 0.08, was acceptable **(Brown, 2015; Kline, 2015; Piaw, 2013)**.

8.1.1 Convergent & Discriminant Validity

All the loading was significant for convergent validity. **Table-1** shows that the composite reliability (CR) estimates of the constructs recorded values above 0.8 and it indicated good reliability in the construct. The average variance extracted (AVE) also recorded values greater than 0.50. The CFA model of students' perception of the learning indicated adequate convergence or internal consistency. Values of all constructs' Average Variance Extracted (AVE) were more than

Mean Squared Variance (MSV), the corresponding inter-construct squared correlations. Therefore, the five constructs of students' perception of learning under the CFA model, demonstrated discriminant validity.

8.2 Structural Equation Modelling (SEM): Model Estimation

The SEM model estimation **(Figure-3)** indicated approximate fit indices. The CMIN/DF value was 2.494, which was quite good, at less than 3.00. Goodness of fit index (GFI = 0.860), Adjusted Goodness of fit index (AGFI = 0.830), Comparative fit index (CFI = 0.925), Normed fit index (NFI = 0.881), Relative fit index (RFI = 0.867), Incremental fit index (IFI = 0.925) and Tucker-Lewis fit index (TLI = 0.916) recorded values above 0.9, as shown in the Table, justified the model fit. The Root Mean Square Error of Approximation (RMSEA) value at 0.068, was less than 0.08 and hence acceptable and The Standardized Root Mean Squared Residual (RMR) value was 0.080, which was fair (should be < 0.08) and also confirmed the model fit. The S(RMR) value at less than 0.080, was acceptable **(Brown, 2015; Kline, 2015; Piaw, 2013)**.

9. Findings of the Study

The findings of Structure Equation Modelling (SEM) validated the model fit with several indicators. The result outcomes revealed that all the factors like students' learning activities, students learning resources and facilities, proposed teaching practices and strategies for the students' motivation, had supported overall students' learning and competency building **(Table 2)**. The three variables, SLA1, SLRF4 and UPTP1, reported no contribution to the study **(Figure-2)**.

10. Suggestions

To work on the feedback on learning perception and understanding teaching as a process for learners, the universities should have the procedure to conduct students' surveys, at their workplace, to improve overall performance (**Nair et al., 2011**) on a regular basis. Instructors should adopt various teaching methods, by considering diverse learning styles, to promote the campus's right learning environment **(Alshami and Al Maghraby, 2013)**.

11. Conclusion

The paper empirically examined the business students' perception of their learnings, at the University of Hail, Kingdom of Saudi Arabia. The research proposed five hypotheses, to test the model fit. The study's findings indicated that all five assumptions supported the students' perception of their learning in the competency building. The study also highlighted the five factors, considered by performing SEM after the EFA and CFA. The study could provide a strong prediction of students' perception of their learning, in developing students' competencies, for the University of Hail, Saudi Arabia, and the other universities across the country and the world. Each factor in the study has its individual and collaborative contribution to students' learning and competency building.

12. Limitations of the Study

While there are thirty-three universities in the kingdom of Saudi Arabia (**MOE, 2021),** the study was limited to business students of University of Hail of Kingdom of Saudi Arabia. The students shared their experiences during the period of Covid-19 pandemic, when the students' learning mode was online.

13. Scope for Further Research

The students' perception of factors and variables, would provide a basis for further research in higher educational institutions, to improve teaching and learning quality to build students' competencies.

14. References

Al Kuwaiti, A., & Subbarayalu, A. V. (2015). Appraisal of students experience survey (SES) as a measure to manage the quality of higher education in the Kingdom of Saudi Arabia: an institutional study using six sigma model. *Educational Studies*, *41*(4), 430–443. https://doi.org/10.1080/03055698.2015.1043977

Alderman, L., Towers, S., & Bannah, S. (2012). Student feedback systems in higher education: A focused literature review and environmental scan. In *Quality in Higher Education*. https://doi.org/10.1080/13538322.2012.730714

Alshami, A., & Al Maghraby, M. (2013). Learning style and teaching method preferences of Saudi students of physical therapy. *Journal of Family and Community Medicine*, *20*(3), 192. https://doi.org/10.4103/2230-8229.122017

Arbuckle, J. (2010). Ibm Spss Amos 19: User's Guide. In *IBM Spss Amos*.

Barrie, S. C., Bucat, R. B., Buntine, M. A., Burke da Silva, K., Crisp, G. T., George, A. V., Jamie, I. M., Kable, S. H., Lim, K. F., Pyke, S. M., Read, J. R., Sharma, M. D., & Yeung, A. (2015). Development, Evaluation and Use of a Student Experience Survey in Undergraduate Science Laboratories: The Advancing Science by Enhancing Learning in the Laboratory Student Laboratory Learning Experience Survey. *International Journal of Science Education*, *37*(11), 1795–1814. https://doi.org/10.1080/09500693.2015.1052585

Bernaus Merce, & Gardner, R. C. (2001). Teacher Motivation Strategies , Student Perceptions , Student Motivation , and English Achievement. *The Modern Language Journal*, *92*(3), 387–401. http://users.telenet.be/cr32258/language motivation.pdf

Biggs, J. (1999). Teaching for Quality Learning at University. Assessing for learning quality: II. Practice. In *Teaching for Quality Learning at University*.

Brown, T. (2015). Confirmatory Factor Analysis for Applied Research, Second Edition. In *Guilford Publications*.

Carter, M. A. (2013). A Study of Students' Perceptions of the Online Component of a Hybrid Postgraduate Course. *Procedia - Social and Behavioral Sciences*, *84*, 558–568. https://doi.org/10.1016/j.sbspro.2013.06.604

Delaney, J., Johnson, A., Johnson, T., & Treslan, D. (2010). Students' Perceptions of Effective Teaching in Higher Education. *Distance Education, Learning and Teaching Support (DELTS)*, 1–19. http://www.mun.ca/educ/faculty/mwatch/laura_treslan_SPETHE_Paper.pdf

Devlin, M. (2002). An improved questionnaire for Gathering student perceptions of teaching and learning. *Higher Education Research and Development*, *21*(3), 289–304. https://doi.org/10.1080/0729436022000020788

Gaskin, J. (2016).*"Stats Tool Pacakage", Gaskination's StatWiki*. http://statwiki.kolobkreations.com

Gibbs, G., Simpson, C., & Macdonald, R. (2003). Improving student learning through changing assessment – a conceptual and practical framework. *... for Research into Learning and...*, 1–10. https://www.open.ac.uk/fast/pdfs/Earli-2003.pdf

Gulikers T.,M., J., Bastiaens J., T., Kirschner A., P., & Kester, L. (2006). *Running head: Student Perceptions of Assessment Authenticity*. 381–400.

Hamshire, C., Barrett, N., Langan, M., Harris, E., & Wibberley, C. (2017). Students' perceptions of their learning experiences: A repeat regional survey of healthcare students. *Nurse Education Today*, *49*, 168–173. https://doi.org/10.1016/j.nedt.2016.11.019

Jump, L., & Jump, R. (2006). Learning academic skills online/ : Student perceptions of the learning process. *Designing the Future of Learning*, *1996*, 45–54.

Kline, R. B. (2015). Principles and practice of structural equation modelling (4th ed.). *Methodology in the Social Sciences*.

Kohout-Tailor, J., & Sheaffer, K. E. (2020). Using open educational resources to empower student creators. *Journal of Electronic Resources Librarianship*, *32*(1), 11–18. https://doi.org/10.1080/1941126X.2020.1709728

Meng, L., & Jin, Y. (2017). A confirmatory factor analysis of the Utrecht Work Engagement Scale for Students in a Chinese sample. *Nurse Education Today*. https://doi.org/10.1016/j.nedt.2016.11.017

MOE (2021, March 01). University Education. https://www.moe.gov.sa/ar/Pages/default.aspx#

Nair, C. S., Patil, A., & Mertova, P. (2011).Enhancing the quality of engineering education by utilising student feedback: Quality and the engineering student experience: An institutional approach. *European Journal of Engineering Education*, *36*(1),3-12. https://doi.org/10.1080/03043797.2010.518231

O'Brien, R., McGarr, O., & Lynch, R. (2020). Students' perceptions of lecturer power and authority in a higher education PBL business programme. *Teaching in Higher Education*, *0*(0), 1–17. https://doi.org/10.1080/13562517.2020.1725881

Pat-El, R. J., Tillema, H., Segers, M., & Vedder, P. (2013). Validation of Assessment for Learning Questionnaires for teachers and students. *British Journal of Educational Psychology*, *83*(1), 98–113. https://doi.org/10.1111/j.2044-8279.2011.02057.x

Piaw, C. Y. (2013). Mastering Research Statistic. *McGraw-Hill Education (Asia)*.

Rockmore, T. (2005). On Constructivist Epistemology. *Constructivist_Epistemology*.

Skinner, B. F. (1988).*The selection of behavior: The operant behaviorism of B. F. Skinner*. Cambridge University Press.

Song, L., Singleton, E. S., Hill, J. R., & Koh, M. H. (2004). Improving online learning: Student perceptions of useful and challenging characteristics. *Internet and Higher Education*, *7*(1), 59–70. https://doi.org/10.1016/j.iheduc.2003.11.003

Visser-Wijnveen, G. J., van der Rijst, R. M., & van Driel, J. H. (2016). A questionnaire to capture students' perceptions of research integration in their courses. *Higher Education*. https://doi.org/10.1007/s10734-015-9918-2

Zerihun, Z., Beishuizen, J., & van Os, W. (2012). Student learning experience as indicator of teaching quality. *Educational Assessment, Evaluation and Accountability*, *24*(2), 99–111. https://doi.org/10.1007/s11092-011-9140-4

Table-1: Results of Convergent and Discriminant Validity

	CR	AVE	MSV	MaxR(H)	SLA	SLPCB	SSML	UPTP	SLRF
SLA	0.871	0.629	0.608	0.88	**0.793**				
SLPCB	0.916	0.646	0.608	0.918	0.78	**0.804**			
SSML	0.876	0.587	0.558	0.887	0.747	0.72	**0.766**		
UPTP	0.88	0.596	0.465	0.886	0.501	0.563	0.682	**0.772**	
SLRF	0.817	0.529	0.468	0.824	0.622	0.533	0.684	0.441	**0.727**

Source: (Gaskin, 20016), "Name of section", Gaskination's StatWiki. http://statwiki.kolobkreations.com

Table-2: Justification of Hypotheses

Path from->to	Standardized Estimate	Standard Error	t-value	p-value	Findings	Conclusion
H01: SLA->OSLP->SLPCB	1.190	0.90	13.215	***P<.001	Fail to accept H01	Supported
H02: SLRF->OSCL->SLPCB	0.728	0.086	8.47	***P<.001	Fail to accept H02	Supported
H03: UPTP->OSCL->SLPCB	0.873	0.102	8.60	***P<.001	Fail to accept H03	Supported
H04: SSML->OSCL->SLPCB	1.358	0.129	10.53	***P<.001	Fail to accept H04	Supported
H05: OSLP->SLPCB	1.098	0.103	10.62	***P<.001	Fail to accept H05	Supported

Chi-square (df)=324 (247); p<.01 IFI=.925; CFI=.925; RMSEA=.068; CMIN/DF =2.494

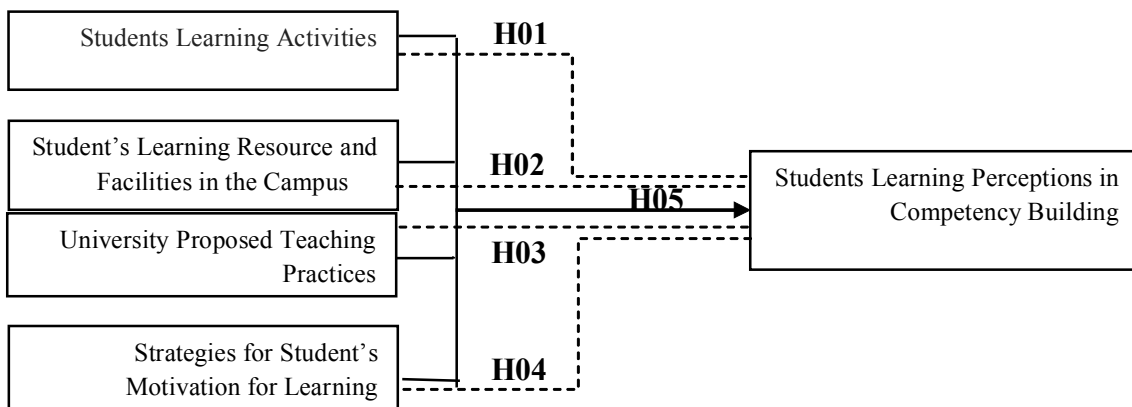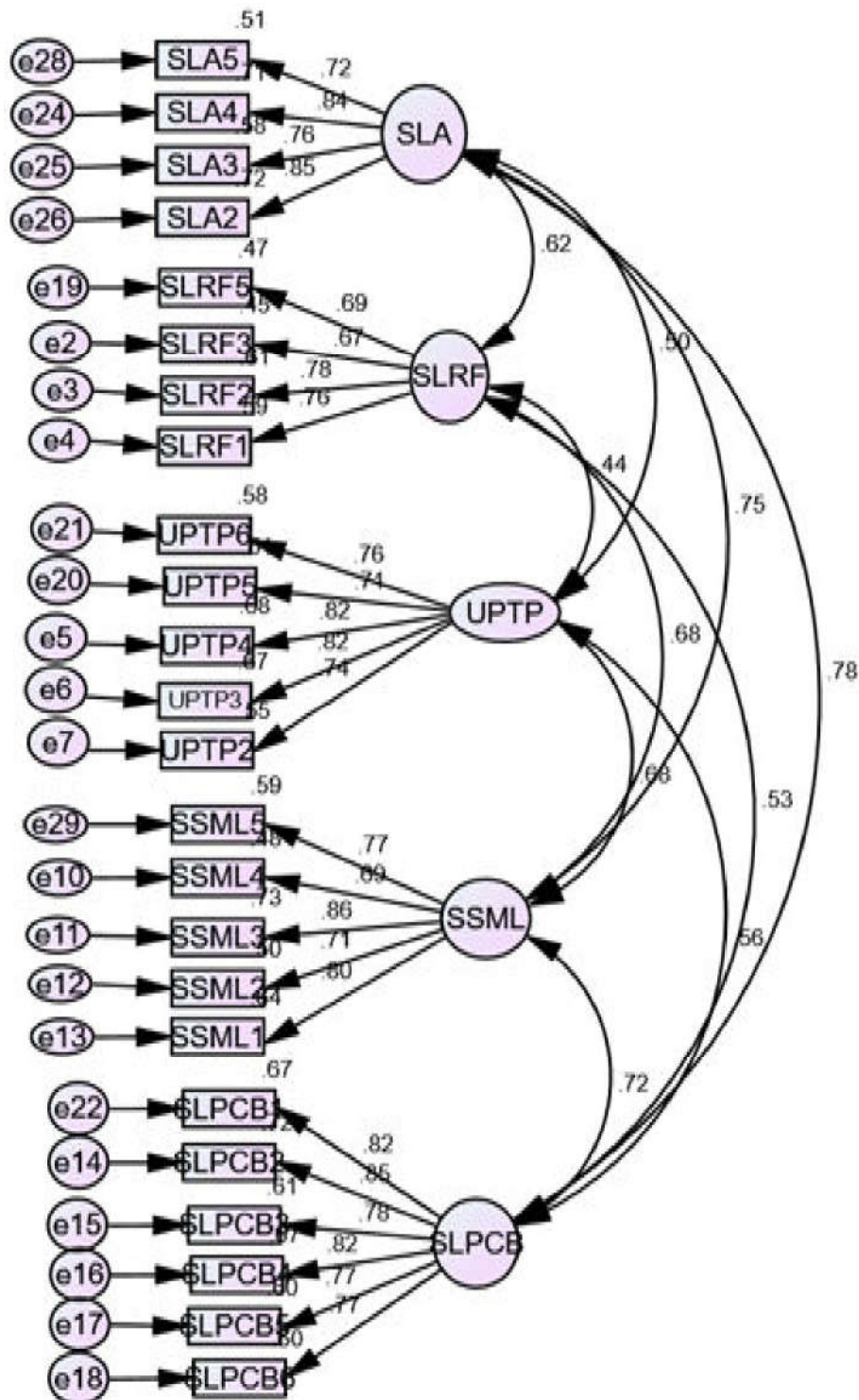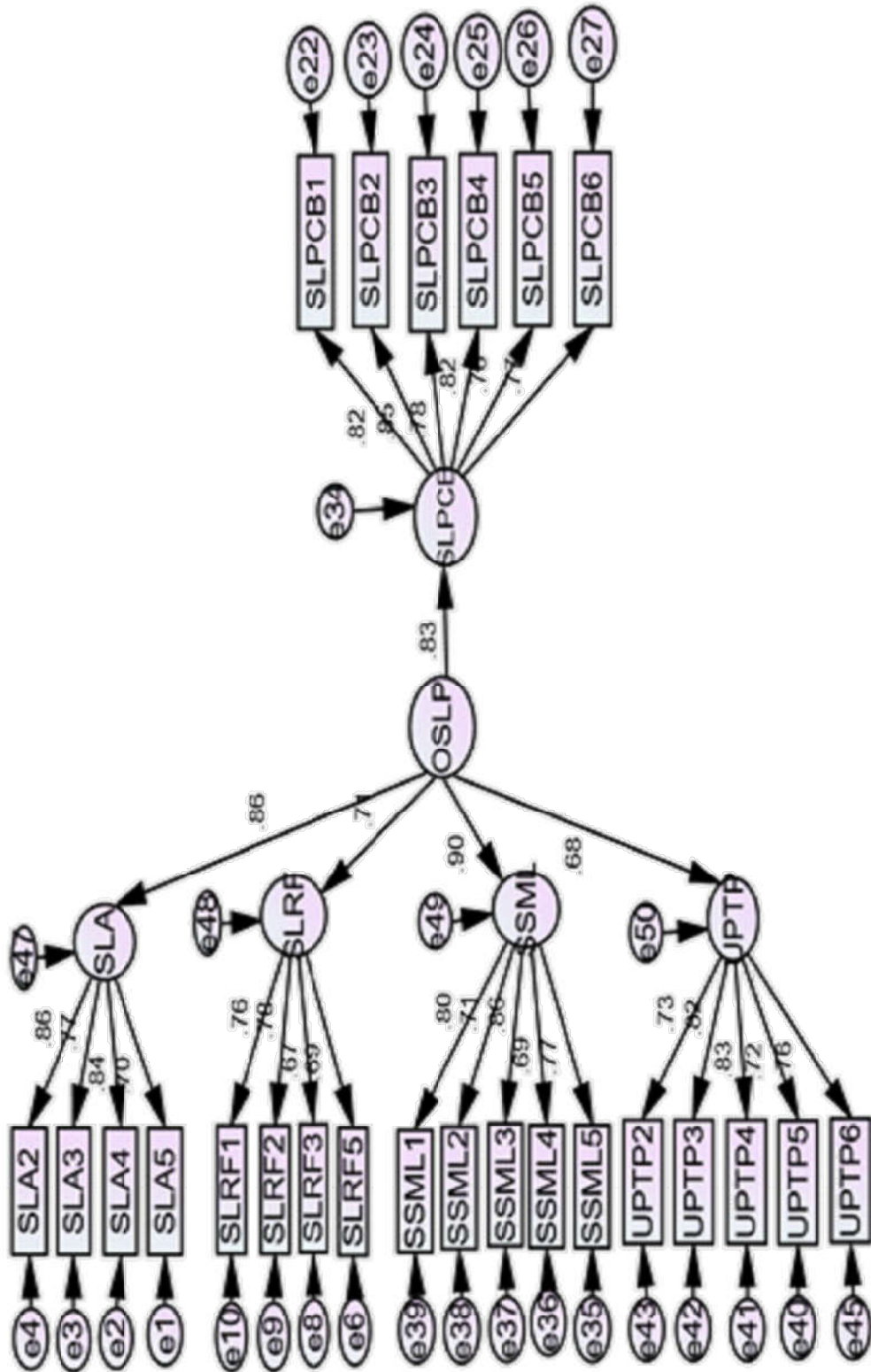**Figure-1: Measurement Model of Students' Perceptions of their Learning**

Figure 2: Findings of the Confirmatory Factor Analysis (CFA) of Students Perception.

Figure-3: Findings of the Structural Equation Modeling (SEM)