International Journal of Research Studies in Education
2022 Volume 11 Number 16, 57-67

Language motivation of the students: A structural equation model

Dipolog, Susan ✉
University of Mindanao, Philippines (dipologsusan@yahoo.com)

Received: 26 October 2022
Revised: 1 November 2022
Accepted: 8 November 2022
Available Online: 8 November 2022
DOI: 10.5861/ijrse.2022.361

ISSN: 2243-7703
Online ISSN: 2243-7711

OPEN ACCESS

Abstract

The purpose of this study aimed to determine the most appropriate model in the language motivation of the students. In addition, to ensure a significant relationship between the exogenous variable: classroom management, student engagement, and language learning attitudes and the endogenous variable in language motivation. Furthermore, this non-experimental and correlational research design and structural model determine the most appropriate language motivation model. Hence, the sample random sampling technique was used to determine the 400 college students as respondents of the study. Thus, the statistical used: mean, Pearson r, regression, and Structural Equation Model (SEM). The exogenous variables have a significant correlation with endogenous for which the fifth model is the most result of the study. Classroom management includes managing classroom behavior, specific teaching technique, working with parents, and planning and support; student engagement includes: liking for learning, liking for school, effort and persistence, extracurricular activities and cognitive; language learning attitudes include: self-image, inhibition, risk-taking, ego permeability, motivation and ambiguity influenced language motivation which includes affective, goal orientation and expectancy.

Keywords: education, classroom management, student engagement, language learning attitudes, language motivation, structural model, Philippines

Language motivation of the students: A structural equation model

1. Introduction

It is an obstacle in the increase on the lack of learning of the students when language motivation is concerned. The lack of motivation was one of the reason that the students were not able to learned (Erdogan, 2010). The negative thoughts and lack of motivation would be the hindrance to learn language. Thus, in the global study, most of the people experienced problem regarding language learning because of of the poor quality of teachers' expertise to hone their learnings. The students experienced lack of strong foundation, self confidence in using language and most of all, lack of motivation. Meanwhile, it has been proven that language motivation is a big problem of the country that causes negative effects on the quality and standard of the learning of the students (Cabanac, 2017). Furthermore, students need to learn to hone their motivation that serve as a foundation towards the efficiency of their language motivation (Felicilda, Felicilda & Tabañag, 2019). In this regard, language motivation was one of the learning factor that need to be developed as their best weapon in achieving language learning. On the other hand, an appropriate task needs to apply as a method of the teachers to students to shape their motivation and fully hone their interest. However, the teacher classroom management is a great help to raise the level of language motivation of the students (Kirinic, Dvorsky, & Bakic-Tomic, 2015).

On the other hand, the present study also agrees (Bergil, 2016) that students who acquire language learning through motivation are helpful as a part of the environment classroom for their thorough learning. Therefore, there are studies on language motivation but no studies on classroom management, student engagement, and language learning attitudes using the structural equation model. which is a reliable approach to language motivation. The classroom management, student engagement, and language learning attitudes will achieve when each one acquires the language motivation where is the most effective weapon in the interactions of every person in the world. The researcher recommended looking into variables that may aid in research in local and global awareness and diverse research in connections to provide a good foundation on the level of language motivation of the students.

Research Objectives - This study aims to determine and develop a structural model of language motivation. The study ensured the following objectives: 1. Determine the level of classroom management based on managing classroom behavior; specific teaching technique; working with parents and planning and support. 2. Determine the level of student engagement based on liking for learning; liking for school; effort and persistence and extracurricular activities. 3. Determine the level of language learning attitudes based on self-image; inhibition; risk-taking; ego permeability; motivation and ambiguity. 4. Determine the level of language motivation of students based on affective; goal orientation and expectancy. 5. Determine the significant relationship between classroom management and language motivation; student engagement and classroom engagement and language learning attitudes and language motivation. 6. Recognize the combined and single influence of classroom management, student engagement, and language learning attitudes on language motivation. 7. Determine the most appropriate model for the language motivation of students.

Hypothesis - The null hypotheses of this study were developed and tested at a 0.05 level of significance in which there is a significant relationship between classroom management and language motivation; student engagement and language motivation and language learning attitudes and language motivation. While, classroom management, student engagement, and language learning attitudes have no significant influence on students' language motivation. Lastly, there is no most appropriate model for students' language motivation.

2. Methodology

The design of this study is a descriptive, correlational, and causal-comparative design that describes the state

of affairs that would exist during the actual research to explore the causes of the specific problem involving a group of individuals whose responses are continuous data. This research also used a structural estimation model to assess the correlation of each variable (Gill, 2017). The descriptive correlational research design refers to the establishment and existence of a predictive relationship. It uses two or more data sets to evaluate a significant correlation of each variable. In addition, this study used Structural Equation Model (SEM) to compare other statistical methods. Furthermore, a structural equation model is one of the more complex methods of data analysis in which determines a structure for the covariance between the modified variables, which gave the alternative name of covariance structure modeling, thus, offer more meaningful and valid results (Byrne, 2017).

This descriptive study was analyzed using quantitative data about the said problem. The quantitative aspect is an appropriate data collection method designed to target respondents who answered the questions. The data collection process on the use of questionnaires. The focus of this research has been to develop and use linguistic models, theories, and hypotheses about the problem. It is empirical data on the scale level gap from respondents, responses to classroom management, student engagement, language learning attitudes, and language motivation. This research focused on adapting the data to hit models in classroom management, student engagement, language learning attitudes and language motivation. Thus, this causal design describes the relationship of the overt and covert variables of the research (Hasman, 2015). Therefore, when the hypothesized model is rejected based on the goodness of statistical fit, an alternative model that fits the data needs to develop (Bollen, Chen, Curran, Kirby and Paxton 2016).

2.1 Sampling Design

The design of this study is a quantitative research method of data collection that describes the relationship of a number measured in a systematic way on the language motivation of college students in Region XI of private schools according to the objective of this study. It analyzed the level of language motivation of 400 college students from 6 branches of the University in Region XI. in the 2019-2020 school year of the department of education from 1st to 4th year who are qualified to answer the questionnaire and gave data for the study. However, to determine the number of respondents appropriate to the Structural Estimation Model, Slovin's formula was used in which the maximum sample number was 400 with a .05 significance level.

In addition, the Structural Forecast Model sample size in a reliable attempt (Ogunlana, Ogunsami, & Oke, 2017). They indicated that a sample size between 300 and 400 would fit the Structural Model. Supported also that there should be 200 but not more than 400 test sizes (Bacon, 2016). However, the Model Structural Evaluation analysis becomes cumbersome when the sample size exceeds 400 to 500 participants. Therefore, the Structural Model Study will require only 200 to 400 (Von Der Heidt & Scott, 2017). On the other hand, some scholars argue that the sample size is not particularly dependent on the size or smallness of the population number (Sergiovane, 2015). Therefore, the size or smallness of the number of respondents did not matter researchers preferred to consider the 400 respondents who answered the questionnaire from six branches of University of Region XI. In selecting the respondents, the researcher used stratified random sampling to determine the number of students in each school that stratified random sampling is having an equal chance of being selected as a research respondent (Fraenkel & Hyun, 2017). Random sampling was a process that ensured that all members of the population had an equal opportunity to select as the sample unit (David, 2015).

2.2 Statistical Design

The statistical tools used for data analysis and interpretation were as follows:

Mean. It is to determine the level of classroom management, student engagement, language learning attitudes and language motivation.

Standard Deviation. It is to measure the fragmentation of a frequency distribution.

Pearson Product Moment Correlation. It is used to determine the significant relationship between classroom management, student engagement, language learning attitudes and language motivation.

Multiple Regression. It is to determine the significant predictor of language motivation.

Structural Equation Model (SEM). It uses to search for the best and most appropriate model. In analyzing the factors, it is necessary to conduct factor analysis on the hidden variables that suggested a cut-off value of 0.50 while (Ullman & Bentler, 2012) used 0.45 in modeling the construction safety culture. The essence of the test based on (Savalei & Bentler, 2010) is to ensure the elimination of traits with low correlations with traits of other hidden factors in the final SEM. The cut-off value is affected by the sample size but a range of 0.45 to 0.50 is considered appropriate. Furthermore, this tool was used to determine the model that best suited the organizational capability.

The goodness of Fit Statistics for Alternative Model through Analysis of Moment Structure (AMOS). To determine the most appropriate model, all of the stated essential indicators must be consistent with the subsequent premise, as follows: Chi Square/Degree of Freedom (CMIN/DF) 0 <value <2; p Value> .05; Normative Fit Index (NFI)> .95; Comparative Fit Index (CFI)> .95; Goodness of Fit Index (GFI)> .95; Tucker-Lewis Index> .95; Root Mean Square Error of Approximation (RMSEA) <.05; and P-close> .50.

2.3 Geographical Area

The research study aims to determine the language motivation in selected College students of Region XI, located in the Southeastern Part of Mindanao, which includes the cities of Davao, Davao City, Davao del Norte, and Davao del Sur. Region XI experienced a problem regarding students' language motivation. Many students are afraid to speak in front of other people because of their low level of language motivation. Furthermore, the researcher wanted to know the scope of classroom management, student engagement, and language learning attitudes are related to Region XI's language motivation. The map of Davao city showed the location of private schools with College students conducted by the research. Davao City is the largest city in the Philippines in land size and the city with the largest population outside the Metro.

3. Results

This section presents the determination and outcome of the structural standard model of language motivation through classroom management, student engagement, and language learning attitudes. The data collected as a result was the analysis and interpretation of the data gathered developed according to the objectives.

3.1 Classroom Management

Table 1 shows the first variable on the level of the classroom management presented variable of its indicators as shown in the attached questionnaire are also analyzed and interpreted. In addition, table 1 reveals the level of classroom management with a total mean score of 3.94 as a high with a standard deviation of 0.47. It shows that the indicator with the highest mean of 4.09 as the highest is the result. Meanwhile, the working with parents' indicator got the lowest mean score of 3.77, described as the high descriptive level.

Table 1

Classroom management level

Indicator	SD	Mean	Descriptive Level
Managing Classroom Behavior	0.61	4.05	high
Specific Teaching Technique	0.42	3.83	high
Working with Parents	0.74	3.77	high
Planning and Support	0.61	4.09	high
Total	0.47	3.94	high

3.2 Student engagement level

The level of the student engagement in Table 2 and each indicator was analyzed and interpreted. Table 2 presented the results based on the level of student engagement with a total mean of 4.08 as high with a standard deviation of 0.41. It shows the mean of 4.42 as very high is the liking for learning. However, the one with the lowest mean indicator of 3.49 as high is the extracurricular activities.

Table 2

Student engagement level

Indicator	SD	Mean	Descriptive Level
Liking for Learning	0.53	4.42	Very high
Liking for School	0.60	4.32	Very high
Effort and Persistence	0.42	4.03	high
Extracurricular Activities	0.84	3.49	high
Cognitive	0.52	4.12	high
Total	0.41	4.08	high

3.3 Level of language learning attitudes

The language learning attitudes level of the students had six indicators shown in Table 3 as a high descriptive level with a total mean of 3.92 and a standard deviation of 0.40. The result shows that the one with the highest mean score indicator of 4.28 described as the very high level is motivation. The lowest mean of 3.56 that as high is ego permeability.

Table 3

Level of language learning attitudes

Indicator	SD	Mean	Descriptive Level
Self-image	0.54	3.95	high
Inhibition	0.66	3.76	high
Risk-taking	0.55	3.85	high
Ego Permeability	0.62	3.56	Very high
Motivation	0.53	4.28	high
Ambiguity	0.54	4.14	high
Total	0.40	3.92	high

3.4 Level of language motivation

The level of language motivation of the students with three indicators had a total mean of 4.04 and a standard deviation of 0.48. The result shows that the indicator with the highest mean of 4.10 is the motivation got a high description. While the goal orientation indicator with the lowest mean score of 3.95 is a high.

Table 4

Level of language motivation

Indicator	SD	Mean	Descriptive Level
Affective	0.52	4.10	high
Goal Orientation	0.55	3.95	high
Expectancy	0.52	4.08	high
Total	0.48	4.04	high

3.5 Significant relationship between classroom management and language motivation

The significant relationship between classroom management and language motivation is in Table 5.1 with a total r-value of .407 corresponding probability of $p < .000$ is less than the 0.05 level of significance set in the study. In addition, the null hypothesis is therefore unacceptable and states that there is a significant correlation

between the classroom management and the language motivation of the students. Suggests that very high levels of classroom management can result in a very high levels of language motivation. Further, it is noticeably shown in the data that managing classroom behavior, specific teaching technique, working with parents and planning and support indicators of classroom management, when correlated with affective, the total r-value is .340 with p-value <0.05 significant. When indicators of classroom management with the goal orientation, the total r-value is .362 with p-value <0.05 therefore, significant. When indicators of classroom management are associated with expectancy, it has a total r-value of .403 with a p-value <0.05, therefore, significant.

Table 5.1

Significant relationship between classroom management and language motivation

Classroom Management	Language Motivation			
	Affective	Goal Orientation	Expectancy	Total
Managing Classroom Behavior	.236** (.000)	.253** (.000)	.309** (.000)	.294** (.000)
Specific Teaching Technique	.338** (.000)	.351** (.000)	.372** (.000)	.391** (.000)
Working with parents	.220** (.000)	.225** (.000)	.244** (.000)	.253** (.000)
Panning and Support	.316** (.000)	.350** (.000)	.384** (.000)	.386** (.000)
Total	.340** (.000)	.362** (.000)	.403** (.000)	.407** (.000)

*Significant at .05 significant level

3.6 Significant relationship between student engagement and language motivation

The significant relationship between student engagement and language motivation was shown in. Table 5.2 with a total R-value of .529 and the corresponding probability of p <.000 is less than the 0.05 level of significance set in the study. However, the null hypothesis is unacceptable and states a significant correlation between student engagement and language motivation. Furthermore, this suggests that very high levels of student engagement can result in very high levels of language motivation. Significantly the data showed that liking for learning, liking for school, effort and persistence, extracurricular activities and cognitive learning were indicators of the student engagement correlated with the affective with a total R-value was .496 with p-value <0.05, therefore, significant. Thus, an indicator of student engagement from the goal orientation with a total R-value of .464 with a p-value <0.05.

Table 5.2

Significant relationship between student engagement and language motivation

Student Engagement	Language Motivation			
	Affective	Goal Orientation	Expectancy	Total
Liking for Learning	.398* (.000)	.346** (.000)	.370** (.000)	.410** (.000)
Liking for School	.389** (.000)	.373** (.000)	.374** (.000)	.418** (.000)
Effort and Persistence	334** (.000)	.323** (.000)	.309** (.000)	.355** (.000)
Extracurricular Activities	.234** (.000)	.225** (.000)	.242** (.000)	.257** (.000)
Cognitive Learning	.440** (.000)	.408** (.000)	.419** (.000)	.467** (.000)
Total	.496** (.000)	.464** (.000)	.478** (.000)	.529** (.000)

*Significant at .05 significant level

Therefore, significant indicators of student engagement are correlated with the expectancy with a total R-value of .478 with a p-value <0.05, therefore, it is still significant.

3.7 Significant relationship between language learning attitudes and language motivation

A significant relationship between the language learning attitudes and language motivation. Table 5.3 with a

total R-value of .605 and the corresponding probability of p <.000 is less than the 0.05 level of significance. The null hypothesis is unacceptable and states the significant correlation between the language learning attitudes and language motivation. Therefore, suggested that very high levels of the language learning attitudes can result in very high levels of language motivation. It is noteworthy that the data showed that self-image, inhibition, risk-taking, ego permeability, motivation and ambiguity were indicators of language learning attitudes when correlated with affective, the total R-value is .578 with a p-value <0.05. therefore, significant.

Table 5.3

Significant relationship between language learning attitudes and language motivation

Language Learning Attitudes	Language Motivation			
	Affective	Goal Orientation	Expectancy	Total
Self-Image	.415** (.000)	.405** (.000)	.457** (.000)	.470** (.000)
Inhibition	.400** (.000)	.284** (.000)	.284** (.000)	.356** (.000)
Risk-taking	.318** (.000)	.272** (.000)	.339** (.000)	.341** (.000)
Ego permeability	.213** (.000)	.234** (.000)	.197** (.000)	.237** (.000)
Motivation	.5968** (.000)	.550** (.000)	.565** (.000)	.630** (.000)
Ambiguity	.511** (.000)	.489** (.000)	.493** (.000)	.550** (.000)
Total	.578** (.000)	.523** (.000)	.544** (0.000)	.605** (.000)

*Significant at .05 significant level

When language learning attitudes indicators with the goal orientation, the total R-value was .523 with a p-value <0.05. When the language learning attitudes was correlated with expectancy the total R-value of .544 with a p-value <0.05, it still means significant.

3.8 Significantly combined and single influence of classroom management, student engagement, language learning attitudes and language motivation

Table 6 presents the significant and single influence of classroom management, student engagement, and language learning attitudes on language motivation, with a calculated F-value of 89.062, R-value of .635, the adjusted R2 value of .403, and p-value of .000 which is less than the 0.05 level of significance, the overall result agreed with the rejection of the null hypothesis that supported the alternative hypothesis.

Table 6

Significant combined and single influence of classroom management, student engagement and language learning attitudes on language motivation

Language Motivation				
Exogenous Variables	*B*	B	*T*	*Sig.*
Constant	.710		3.390	.001
Classroom Management	.042	.042	.845	.398
Student Engagement	.270	.228	4.250	.000
Language Learning Attitudes	.527	.439	8.408	.000
R	.635			
R^2	.403			
ΔR	.398			
F	89.062			
P	.000			

Therefore, the three exogenous variables have a significant influence on language motivation. An R^2 of .403

indicated with 40.3% of differences in language motivation associated with classroom management, student engagement and language learning attitudes of the students. This means that 59.7% of the variation of language motivation was attributed to the other variables that was not covered in this study. On closer examination, that table shows that of the three exogenous variables, language learning attitudes had a largest contribution (Beta = .527, P-value = .000) followed by student engagement (Beta = .270, P-value = .000) and the lowest was the classroom management (Beta = .042, P-value = .398). Of the three variables, only student engagement and language learning attitudes significantly influenced language motivation.

It can be seen from the data that classroom management has *standardized* and *unstandardized coefficients* .042 and .042, t-value .845 and p-value of .398 (non-significant)*;* student engagement has *standardized* and *unstandardized coefficients of* .270 and .228, t-value of 4.250 and p-value of .000 (significant); and language learning attitudes has *standardized* and *unstandardized coefficients* .527 and .439, t-value of 8.408 and p-value of .000 (significant).

Table 8

Direct and indirect effects of independent variables on the language motivation of students of the most appropriate model

Variables	Direct Effect	Indirect Effect	Total Effect
Classroom Management	-	-	.418
Student Engagement	.062	.500	.562
Language Learning Attitudes	.743	-	.743

3.9 Establishing the most appropriate structural model

The final question of this research focuses on determining the most appropriate model that represents variables as predictors of students' language motivation. Table 7 summarizes the five models developed in this study. It also shows the modification of the proposed framework. In table 1 meet the need for the goodness of fit measures. In determining the most appropriate model within an acceptable range the Chi-square/degrees of freedom value must be between 0 and 2, with a corresponding p-value greater than or equal to 0.05. The Root Mean square of Error Approximately value must be less than 0.05 and have a corresponding p-close value greater than or equal to 0.05. Other indexes such as the Normed Fit Index, Tucker-Lewis Index, Comparative Fit Index, and Goodness of Fit Index must be higher than 0.90. The generated Structural Model 1 shows a direct causal relationship of exogenous variables: classroom management, student engagement, and language learning attitudes with endogenous language motivation. Some calculated signs of this model have difficulty achieving acceptable ranges of values; this model is inappropriate.

Table 7

Summary of Goodness of Fit Measures of Five Structural Models

Model	P-value (>0.05)	CMIN / DF (0<value<2)	NFI (>0.95)	TLI (>0.95)	CFI (>0.95)	GFI (>0.95)	RMSEA (<0.05)	P-close (>0.05)
1	.000	6.934	.723	.712	.752	.792	.122	.000
2	.000	5.372	.789	.788	.820	.843	.105	.000
3	.000	4.210	.872	.876	.899	.887	.090	.000
4	.000	3.915	.898	.902	.922	.906	.085	.000
5	.078	1.372	.979	.990	.994	.981	.031	.938

Legend:
CMIN/DF – *Chi-Square/Degrees of Freedom* NFI –*Normed Fit Index*
GFI – Goodness *of Fit Index* TLI -*Tucker-Lewis Index*
RMSEA – *Root Mean Square of Error Approximation* CFI – Comparative *Fit Index*

The generated Structural Model 2 demonstrates a direct causal relationship of exogenous variables classroom management, student engagement, language learning attitudes and endogenous variable language motivation. This model is not suitable because p-value = .000 and RMSEA = 0.843 with p-close = .000, all index values are not achieved on each premise. The generated Structural Model 3 also shows a direct causal

relationship of student engagement and language learning attitudes towards language motivation. The result is inappropriate because p-value = .000 and RMSEA = .090 with p-close = .000. The generated Structural Model 4 shows the direct causal relationship of the classroom management and language learning attitudes to language motivation. The result is inappropriate as indicated p-value = .000, RMSEA = .085 with p-close value = .000.

Finally, the generated Structural Model 5 demonstrates the direct causal correlation of classroom management, student engagement and language learning attitudes towards language motivation as identified in the most appropriate model. The most appropriate model is in Table 7. The Chi-Square divided by degrees of freedom is 1.372 with a P-value of .078. It indicates the model. The Root Means Square of Error Approximation index is .031 is less than the 0.05 significance level with a related P-close of .938. Also, other indexes such as the Normed Fit Index, Tucker-Lewis Index, and Comparative Fit are highly indicative of the most appropriate model because of all measurements from the criteria. Table 8 shows the direct effects arrows from the predictor variables presented on the left side to the right side where the non-independent variable does not pass through the other variable. Indirect effects are the correlation of the predictor of the variable and the non-independent variable that may mediate one or more variables. Presented in Table 9, the effect of the latent variable and between the indicator, in the latent variable estimated to generate regression in classroom management, student engagement, and language learning attitudes significantly affect the endogenous variable that is language motivation ($p < .05$). A summary of the results of the goodness of fit measures of the five structural models is presented in Table 8.

Table 8

Goodness of Fit Structural Measures of the Most Fit Model

INDEX	CRITERION	MODEL FIT VALUE
P-Close	> 0.05	.938
CMIN/DF	0 < value < 2	1.372
NFI	> 0.95	.979
TLI	> 0.95	.990
CFI	> 0.95	.994
GFI	> 0.95	.981
RMSEA	< 0.05	.031

Legend:

CMIN/DF - Chi-Square/Degrees of Freedom
NFI - Normed Fit Index
TLI - Tucker-Lewis Index
CFI - Comparative Fit Index
GFI - Goodness of Fit Index
RMSEA - Root Means Square of Error Approximation
P-close - P of Close Fit

4. Suggestion

Based on the result, the researcher suggested the following recommendations: The high level of classroom management, student engagement, and language learning attitudes that the three variables that the students focus on the variables increase in the level of language motivation also increases. However, this will make it easier to implement measures related to language motivation like having a program that would enhance the learnings of individual in making his learning effective. The significant relationship of the three variables: classroom management, student engagement, language learning attitudes with language motivation signifies that the three variables should be given focus by the students. If the level of the variables, the level of language motivation also increases.

The very high result of this study will be beneficial to the students as direct beneficiaries to enhance their language motivation by conducting research related to the indicators and variables seen in this study. Therefore, serve as their guide and make the researcher effective with the holistic strategies based on the specific insight into the basic structural model of students' language motivation. In addition, this study has great potential to be used by subsequent researchers due to the very high level of each variable. They can also conduct training or seminars on

language motivation.

5. Conclusion

The use of the structural model reinforcing the study proved to be extremely difficult as it underwent intense evaluation and followed the steps of the specification model, discrimination model, and evaluation model. It demonstrates a very high classroom management, student engagement, and language learning attitudes. There is a significant relationship between classroom management, student engagement, language learning attitudes together with language motivation following the various literature presented in the relationship between each variable. Of the five structural models discovered, only the fifth model shows an exceptional fit to the data as the most appropriate structural model in this study. However, language motivation attributed a lot of factors to consider in the classroom management, student engagement, and language learning attitudes can be the starting point to evaluate and encourage change toward learning of the students (Williams & Burde, 2017). There was a significant correlation between students' engagement and their language motivation because some writers suggested that productive student engagement would create a specific learning environment through the classroom management of the teachers (Turner, 2017). The most appropriate model proves that classroom management, student engagement, and language learning attitudes are the most effective predictors of language motivation indicating students' increased interest.

6. References

Bacon, L. D. (2016). *Using Amos for structural equation modeling in market research*. https://www.bauer.uh.edu/jhess/documents/3.pdf

Bergil, A. (2016). *The influence of willingness to communicate on overall speaking skills among EFL learners. Procedia-Social and Behavioral Sciences*, *232*, 177-187. https://doi.org/10.1016/j.sbspro

Bollen, K. A., F. Chen, P. J. Curran, J. Kirby & P. Paxton (2016). *An empirical evaluation of the use of fixed cutoff points in RMSEA test statistic in structural equation models*.

Byrne, B. M. (2017). *Structural equation modeling with Mplus: Basic concepts, applications, and programming.* New York: Taylor & Francis/Routledge. Ottawa University.

Cabanac, O. (2017). *Teachers' characteristics and their attitudes towards classroom management*. Calabar, Nigeria: Nigerian Rapid Educational Publishers.

David, F. (2015). *Understanding and Doing Research*: A Handbook for Beginners. Iloilo City: Social Science Institute, CPU.

Erdogan, M. (2010). *A qualitative study on classroom management and classroom discipline problems, reasons, and solutions: a case of information technologies class.* http://www.oecd.org/berlin/43541655.pdf

Felicilda, J, A. Felicilda, & R. E. Tabañag (2019). *Common problems in oral communication skills among high school students*. SMCC teacher education Journal.

Fraenkel, J. R. & H. H. Hyun. (2017). *How to design and evaluate research in education* (8th edition). New York, NY: McGraw Hill Companies, Inc.

Gill, P. S. (2017). *An investigation of employee engagement and business outcomes at an engineering services firm*. Eastern Michigan University: ProQuest Dissertation Publishing.

Hasman, A. (2015). *An introduction to structural equation modeling*. In ICIMTH.

Kirinić, A. J. Dvorski & L. Bakić-Tomić. (2015). *Elements of teacher communication competence: An examination of skills and knowledge to communicate*. International Journal of Research in Education and Science (IJRES).

Ogunlana, S., D. R. Ogunsami & A. E. Oke. (2017). *Establishing a common ground for the use of structural equation modelling for construction related research studies*. Australasian Journal of Construction Economics and Buildings, 12(3), 8994.

Savalei, V. & P. M. Bentler. (2010). *Structural equation modeling*. The Corsini Encyclopedia of Psychology.

Sergiovane, M. (2015). *Applied organizational relations: cases in stakeholder management in educational*

setting. British Journal of Education.

Turner, C., R. McClure & S. Pirozzo. (2017). *Injury and risk-taking behavior – A systematic review. accident analysis and prevention*.

Ullman, J. B. & P. M. Bentler. (2012). *Structural equation modeling (SEM)*. Part Four. data analysis methods.

Von Der Heidt, T. & D. R. Scott. (2017). *Partial aggregation for complex structural equation modelling (SEM) and small sample sizes*: An illustration using multi-stakeholder model of cooperative inter-organizational relationships (IORs) in product innovation' presented to the 21st ANZAM 2007 Conference, Sydney.

Williams, M., & Burde, R. (2015). *Psychology for language teacher: a social constructivist approach.* Cambridge: Cambridge University Press. https://doi:10.1007/978-0-387-75734-6_5