

Effects of Transformational Leadership on Student Educational Satisfaction and Student Stress

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Abstract: This paper examines the effects of transformational leadership (TL) on student educational satisfaction (SES) and student stress (SS). Asian students enrolled in business management program at colleges and universities in British Columbia, Canada were surveyed to find out their perceptions as to whether TL used by faculty members improves SES and reduces SS. Results suggest that SES is positively related to the improvement in the level of perceived TL used by instructors/professors. The empirical findings of this paper also suggest that the reduction in the level of SS is related to the improvement in the level of perceived TL used by instructors/professors. However, TL does not mitigate the stress of graduate level students. This paper offers useful insights for instructors based on empirical evidence.

Keywords: Transformational leadership, student educational satisfaction, student stress, Asian students.

INTRODUCTION

The focus of this paper is to examine the effects of transformational leadership on student educational satisfaction and student stress.

Business motives have led Organization for Economic Cooperation and Development (OECD) countries to liberalize their policies to increase import and export in education, which in turn, increased number of international students in North American countries. The international market for educational services has to a large extent been demand-driven, particularly by students from the rapidly emerging countries of North and South-East Asia [1]. Most international trade in higher education services takes place within the OECD area, which received 85% of the world's foreign students [1]. Thus, foreign students represent an important source of export revenue for the North American Colleges and Universities particularly the United States of America and Canada.

Although, foreign students represent an important source of export revenue, they create some challenges for colleges and universities due to their different learning styles, behaviors, cultures, and attitudes, which in turn, lead to student leadership issues and challenges for instructors/professors [2]. Consequently, international students tend to get dissatisfied with educational programs and get "stressed out" which lead to their withdrawal from the educational

programs countering the educational export efforts of North American colleges/universities.

A disturbing trend in student health is the reported increase in student stress nationwide [3]. One of the stressors affecting students can be categorized as academic [4, 5]. Academic stressors include the student's perception of the extensive knowledge base required and the perception of an inadequate time to develop it [6]. Students report experiencing academic stress at predictable times each semester with the greatest sources of academic stress resulting from taking and studying for exams, grade competition, and the large amount of content to master in a small amount of time [7-10]. Student retention and dropout rate often reflect an attempt to alleviate the stress that the student is experiencing [11].

Transformational leadership (TL) when employed by instructors/professors holds great promise for colleges and universities because they can be used to enhance student educational satisfaction (SES) and to reduce student stress (SS) resulting from education. Higher levels of SES and lower levels of SS improve student retention and thereby, increase education export revenue of the academic institutions.

The concept and definition of TL and the embodiment of that leadership in transformational leaders were first coined by Burns [12], and then extended and operationalized by Bass [13] as: "leadership and performance beyond expectations".

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Different authors [14-16] have found positive relationship between TL and employee job satisfaction; and negative relationship between TL and job stress [16-18]. However, there has been very little research testing the relationship between TL and SES and no research has been conducted to test the relationship between TL and SS. Nischan [19] found positive relationship between TL and SES in the education field. Therefore, it is important to examine the relationship between TL and SES and SS within an educational setting. The findings of said examination can be generalized to the broader educational field.

TRANSFORMATIONAL LEADERSHIP AND STUDENT EDUCATIONAL SATISFACTION

Similar to the importance of satisfying customers to retain them for profit-making institutions, satisfying matriculated students is equally important for student retention purposes [20]. Factors such as: i) faculty support to students, ii) quality of education, iii) faculty teaching styles, etc., have positive impact on student educational satisfaction [21-23].

Satisfaction with faculty support is very important for students in their decision to continue their studies at the same educational institution. Guolla [21] indicates that students consider themselves expert consumers of the education service experience since they have taken numerous courses previously. Building continuing study commitment is essential for retaining students in their current academic institution. Therefore, it is important to find strategies that can improve SES. TL, as one such strategy, has been found to encourage open communication with followers, which in turn, enhance SES. Within the educational field, Nischan [19] found a positive relationship to exist between TL and SES.

Students in general, and commerce students in particular, are subjected to face many education related issues such as an unclear mission, or weakly defined goals and objectives, due to poor leadership demonstrated by their instructors/professors in their study environments, all of which contribute to dissatisfaction with education. It has been found out that TL improves employee job satisfaction by increasing positive employee attitudes and clarifying the role of employees [14-16]. Therefore, it is theorized that students' educational satisfaction is related to the degree of their understanding of educational goals and objectives, which are the outcomes of TL. Hence, the following hypothesis is formulated:

H1: The more an instructor's leadership is perceived as being transformational, the higher will be the student's educational satisfaction.

THE IMPACT OF TRANSFORMATIONAL LEADERSHIP ON STUDENT STRESS

Stress, a mental and physical condition, affects students' effectiveness, personal health, and quality of home work. Stress is seen as the consequence of an inadequate fit of student needs and goals with the college environment [11]. Students are faced with many challenges such as heavy course loads, loneliness and conflict with roommates, etc. on a daily basis at colleges [24], which in turn, cause stress for students. When stress is perceived negatively or becomes

excessive, students experience physical and psychological impairment [25], which has a negative impact on their academic performance. Therefore, the harmful and costly consequences of stress demonstrate the need for strategies to limit stressors within the organization [26]. TL, as one such strategy, has been found to encourage open communication with followers, which, in turn, reduces stress [17].

Although, students apply different methods such as effective time management, social support, positive reappraisal, engagement in leisure pursuits, etc., to reduce stress [27, 28], these methods are not enough. Authors such as Tracy and Hinkin [17], Gill *et al.* [18], etc. have found negative relationships between TL and stress in the service industry.

Students, in general, and commerce students, in particular, are subjected to the constant pressure of schoolwork, friends, instructors/professors, tests, quizzes, papers, and many times unplanned or unforeseen peaks in their study environments - all of which contribute to higher levels of study related stress. Therefore, it is theorized that students who are committed to their study mission, goals and objectives (TL outcomes) will feel less study stress than those who are less committed. Accordingly, the following hypothesis is formulated:

H2: The more an instructor's leadership is perceived as being transformational, the lower will be the student's stress.

METHODS

Research Design

This study utilized a survey research (a non-experimental field study design), appropriate to examine the research questions and test their derivative hypotheses. Gall *et al.* [29] also indicate that a survey research is a useful tool for studying sensitive opinions, attitudes, preferences, and behaviors of individuals, particularly when the opinions are reflections of larger underlying attitudinal constructs.

Measurement and Variables

In order to remain (for comparison and reference reasons) consistent with previous research, the measures were taken from three referent studies, which in turn were based on previous studies in marketing, education, and psychology. Measures pertaining to TL were taken from Dubinsky *et al.* [30] and Griffith [31], measures pertaining to SES were taken from Estaville *et al.* [32], and measures pertaining to SS were taken from Dubinsky *et al.* [30].

The questionnaire was pre-tested to ensure that it was effective in a pilot study conducted with 30 representative (of the full pool of respondents) students. Scale items were changed from five-point Likert scale to four-point Likert scale to have consistent responses and to receive possible valid responses from research participants. In addition, study program was used as a control variable.

Program was measured by a single item which asked respondents (Asian students) to indicate the program in which they were currently enrolled at a Canadian academic institution. Categorized alternative responses were: (i) B.S.B.A./B.Com., (0) M.B.A.

Transformational Leadership (TL) was operationally defined as the extent to which instructors/professors motivate and encourage students to use their own judgment and intelligence to solve education related problems, transfer missions to students, and express appreciation for good work. Dubinsky *et al.* [30] used the twelve-item tolerance-of-freedom scale [33], which measures a sales person's relationship with their managers and Griffith [31] used four items that measured intellectual stimulation of teachers. Based on Dubinsky *et al.*'s [30] and Griffith's [31] CFA (confirmatory factor analysis), two items from each study were selected to measure the "transformational leadership" variable in this study. Scale items were reworded to apply to students in the education field and the reliability of these re-worded items was re-tested. These items are:

To what extent does your instructor/professor...?

- TL1) ... make you proud to be associated with him or her?
- TL2) ... encourage you to study?
- TL3) ... transmit a "sense of mission" to you?
- TL4) ... let you use your intelligence to overcome obstacles in the classroom and outside the classroom?

Respondents were asked to indicate their agreement with each item using a four-point Likert scale ranging from "None" to "Extreme". Higher scores indicate that students have a closer relationship with their instructors/professors.

Griffith [31] reported Cronbach alpha of 0.89 for the above 2 items. Cronbach alpha was not reported by Dubinsky *et al.* [30] for the above 2 items. We calculated a Cronbach alpha of .80 on the responses of the 30 students who participated in the pre-test of this scale. Based on the scales reliability, we included all four items in our final questionnaire.

Student Educational Satisfaction (SES) was operationalized as the extent to which students were satisfied with: i) the help they receive from their instructor/professor to understand course materials, ii) the instructor's/professor's teaching style, and iii) education quality provided by their instructor/professor. Estaville *et al.* [32] used fifteen items to measure student's general satisfaction of their educational department, from which we selected three specific items to measure directly the "student educational satisfaction" variable. Scale items were reworded to apply to students in the education field and the reliability of these re-worded items was re-tested. These items are:

To what extent are you satisfied with ...?

- SES1) ... the help that you received from your instructors/professors?
- SES2) ... the teaching styles of your instructors/professors?
- SES3) ... the overall quality of education provided by your instructors/professors?

Respondents were asked to indicate their agreement with each item, using a four-point Likert scale ranging from "None" to "Extreme". Higher scores reflect higher level of student educational satisfaction.

Cronbach alpha was not reported by Estaville *et al.* [32] for the above 3 items. We calculated a Cronbach alpha of .90 on the responses of the 30 students who participated in the

pre-test of this scale. Based on the scales' reliability, we included all three items in our final questionnaire.

Student Stress (SS) was operationally defined as the extent to which students feel a tension or anxiety caused by their studies. Dubinsky *et al.* [30] used the two stress items developed by Motowidlo *et al.* [34]. Based on the CFA reported by Dubinsky *et al.* [30], both items were selected to measure the "student stress" variable. Scale items were reworded to apply to students in the education field and the reliability of these re-worded items was re-tested. These items are:

To what extent do you feel...?

- SS1) ...tense because of your study?
- SS2) ...nervous because of your study?

Respondents were asked to indicate their agreement with each item, using a four-point Likert scale ranging from "None" to "Extreme". Higher scores reflect a higher level of stress perceived by the students.

Cronbach alpha was not reported by Dubinsky *et al.* [30] for the above 2 items. We calculated a Cronbach alpha of .79 on the responses of the 30 students who participated in the pre-test of this scale. Based on the scales reliability, we included both items in our final questionnaire.

Sampling Frame, Questionnaire Distribution, and Collection

The study's pool of subjects includes only (to avoid sampling frame issues) Asian students attending colleges and universities in the Lower Mainland area of British Columbia, Canada (Vancouver, Burnaby, New Westminster, Surrey, and Richmond).

Sampling Methods and Issues

A list of all academic institutions (colleges and universities) in the Lower Mainland area of British Columbia, Canada was created, from which a mailing list was compiled of faculty and students, and to which survey questionnaires were distributed. As the academic institutions were reluctant to provide us with their full student rosters, we need define this subject recruitment method as a convenience (non-random) sampling method.

To mitigate possible sampling bias (the threat to representational ability of a sample), we guided our data collecting team to ensure that subjects met inclusion criteria: i) country of origin (South East Asia), and ii) study program (undergraduate and graduate).

From our sample population pool of about 800 student subjects who met all inclusion criteria, 204 fully completed survey questionnaires (a response rate of 25.50%), were gathered in-person by our data collecting team, and by post.

The confidentiality of all subjects was assured by having them respond anonymously to the questionnaires. All subjects of the study participated voluntarily.

ANALYSES AND RESULTS

Data Analysis Methods

Measures of central tendency, variance, skewness, and kurtosis were calculated on the responses to all of the items.

Table 1. Student Data Statistics

		N = 204	
		\bar{x}	σ
To what Extent do your Instructors/Professors?			
TL1)make you proud to be associated with them?		2.91	0.840
TL2)encourage you to study?		3.05	0.748
TL3)transmit a "sense of mission" to you?		2.93	0.828
TL4)let you use your intelligence to overcome obstacles in the classroom and outside the classroom?		2.93	0.822
To what Extent are you Satisfied with?			
SES1)the help that you receive from your Instructors/Professors?		2.87	0.784
SES2)teaching styles of your Instructors/Professors?		2.93	0.791
SES3)the quality of education provided by your Instructors/Professors?		2.88	0.792
To what Extent you Feel?			
SS1)tense because of your study?		2.30	1.020
SS2)nervous because of your study?		2.20	1.022

N = Number of responses.

σ = Standard deviation.

\bar{x} = Mean score.

Skewness measures for all of the items were within the range of -1.0 to +1.0, which is considered to be an excellent range for most research that requires using statistics appropriate to normal distributions. Therefore, statistics that assume scalar values and symmetric distributions were used to test the hypotheses. Table 1 shows student data statistics.

The n = 204 student subjects break up into the following groups:

- Country of origin: i) China = 161 (78.92%), ii) India = 33 (16.18%), iii) Taiwan = 5 (2.45%), and iv) Korea = 5 (2.45%).
- Program: i) Undergraduate = 95 (46.57%), and ii) MBA = 109 (53.43%).

Table 3. Rotated Component Matrix

	Component		
	1	2	3
To what Extent do your Instructors/Professors?			
TL1)make you proud to be associated with them?	0.829	0.369	-0.111
TL2)encourage you to study?	0.850	0.365	-0.091
TL3)transmit a "sense of mission" to you?	0.825	0.389	-0.094
TL4)let you use your intelligence to overcome obstacles in the classroom and outside the classroom?	0.862	0.306	-0.121
To what Extent are you Satisfied with?			
SES1)the help that you receive from your Instructors/Professors?	0.397	0.809	-0.105
SES2)teaching styles of your Instructors/Professors?	0.348	0.872	-0.059
SES3)the quality of education provided by your Instructors/Professors?	0.448	0.825	-0.021
To what Extent you Feel?			
SS1)tense because of your study?	-0.100	-0.076	0.952
SS2)nervous because of your study?	-0.106	-0.040	0.954

Note: Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
 Rotation converged in 5 iterations.

Table 2. Total Variance Explained - Rotation Sums of Square Loadings

Component	Total Variance Explained		
	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	3.333	37.029	37.029
2	2.617	29.081	66.111
3	1.875	20.838	86.949

Extraction Method: Principal Component Analysis.

Using principle component rotation and Varimax rotation, a Confirmatory Factor Analysis (CFA) on the nine items was run. Three factors explained 86.95% of the variance in the nine items (see Table 2), and all of the items loaded on the expected factors (see Table 3).

The four “transformational leadership” items were factor analyzed, and the resultant weighted score was used as the “TL” scale. The four items loaded roughly equally on the scale, and explained 84.67% of the variance. Cronbach alpha calculated was 0.939 on the four items.

The three “student educational satisfaction” items were factor analyzed, and the resultant weighted score was used as the “SES” scale. The three items loaded roughly equally on the scale, and explained 86.04% of the variance. Cronbach alpha calculated was 0.919 on the three items.

The two “student stress” items were factor analyzed, and the resultant weighted score was used as the “SS” scale. The two items loaded roughly equally on the scale, and explained 92.25% of the variance. Cronbach alpha calculated was 0.916 on the two items.

TESTING OF HYPOTHESES

It was hypothesized that:

- i) The more an instructor’s leadership is perceived as being transformational, the higher will be the student’s educational satisfaction, and
- ii) The more an instructor’s leadership is perceived as being transformational, the lower will be the student’s stress.

A positive relationship between TL and SES was found (see Table 4). That is, the degree of perceived educational satisfaction of Asian students is the function of TL used by their instructors/professors.

A negative relationship between TL and SS was found (see Table 4). That is, the reduction in the degree of perceived stress of Asian students is related to the improvement in the degree of perceived TL used by their instructors/professors.

No significant relationships between i) Program and SES and ii) Program and SS were found (see Table 4).

The regression equations are as follows:

$$SES = -0.029 + 0.747 TL + 0.062 \text{ Program}$$

$$SS = 0.101 - 0.227 TL - 0.216 \text{ Program}$$

$$SES (\text{Undergraduate Program}) = 0.036 + 0.701 TL$$

$$SS (\text{Undergraduate Program}) = -0.101 - 0.430 TL$$

$$SES (\text{Graduate Program}) = -0.025 + 0.806 TL$$

$$SS (\text{Graduate Program}) = 0.117 + 0.038 TL$$

The sample size based on the study program breaks up into the following groups:

- i) Undergraduate = 95 (46.57%), and
- ii) Graduate = 109 (53.43).

We noted that the size of the sample (with a predominance of graduate level students), might affect the results. We first tested to see if TL, SES, and SS were

significantly different between undergraduate and graduate students. Using one-way ANOVAs, we found that perceived TL did NOT differ between the 2 types of students (sig. = 0.347), perceived SES did NOT differ between the 2 types of students (sig. = 0.253), and perceived SS did NOT differ between the 2 types of students (sig. = 0.080).

We then re-tested the hypotheses for subsets of the sample.

Undergraduate Students

A positive relationship between TL and SES was found (see Table 4). That is, the degree of perceived educational satisfaction of undergraduate level Asian students is the function of TL used by their instructors/professors.

A negative relationship between TL and SS was found (see Table 4). That is, the reduction in the degree of perceived stress of undergraduate level Asian students is related to the improvement in the degree of perceived TL used by their instructors/professors.

Graduate Students

A positive relationship between TL and SES was found (see Table 4). That is, the degree of perceived educational satisfaction of graduate level Asian students is the function of TL used by their instructors/professors.

No significant relationships between TL and SS were found (see Table 4).

Tables 5 and 6 provide the summary statistics of the regression analysis.

Note that around:

- 56.2% ($R^2 = 0.562$) of the variance in the degree of SES can be explained by the degree of Program and TL,
- 6.60% ($R^2 = 0.066$) of the variance in the degree of SS can be explained by the degree of Program and TL,
- 54.20% ($R^2 = 0.542$) of the variance in the degree of SES can be explained by TL in the undergraduate program,
- 22.60% ($R^2 = 0.226$) of the variance in the degree of SS can be explained by the degree of TL in the undergraduate program,
- 58.20% ($R^2 = 0.582$) of the variance in the degree of SES can be explained by TL in the graduate program, and
- 0.10% ($R^2 = 0.001$) of the variance in the degree of SS can be explained by the degree of TL in the graduate program.

As shown in Table 6, ANOVA's tests (except for the relationship between TL and SS - Graduate Program) are also significant.

DISCUSSION

The main purpose of this study was to examine whether SES and stress levels are related to the degree of TL used by instructors/professors. These students’ perceptions and judgments are the basis of our findings that the degree of perceived SES and SS are related to the degree of TL used by instructors/professors at the educational institutions. This

Table 4. Regression Coefficients^{a, b}

Relationship Between TL and SES (N = 204)					
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-0.029	0.064		-0.452	0.652
TL	0.747	0.047	0.747	15.957	0.000
Program	0.062	0.094	0.031	0.662	0.509
Relationship Between TL and SS (N = 204)					
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.101	0.093		1.081	0.281
TL	-0.227	0.068	-0.227	-3.316	0.001
Program	-0.216	0.137	-0.108	-1.582	0.115
Relationship Between TL and SES [Undergraduate Program: B.S.B.A./B.Com. (N = 95)]					
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.036	0.073		0.494	0.623
TL	0.701	0.067	0.736	10.495	0.000
Relationship Between TL and SS [Undergraduate Program: B.S.B.A./B.Com. (N = 95)]					
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-0.101	0.091		-1.115	0.268
TL	-0.430	0.082	-0.475	-5.210	0.000
Relationship Between TL and SES [Graduate Program: M.B.A. (N = 109)]					
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-0.025	0.059		-0.424	0.672
TL	0.806	0.066	0.763	12.207	0.000
Relationship Between TL and SS [Graduate Program: M.B.A. (N = 109)]					
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.117	0.096		1.222	0.225
TL	0.038	0.106	0.035	0.360	0.719

^aDependent Variables: SES, SS.

^bIndependent Variables: TL and Program. Program was dealt with as a single dummy variable: i) B.S.B.A./B.Com., 0) M.B.A.

^cLinear Regression through the Origin.

N = Number of responses.

TL = Transformational Leadership.

SES = Student Educational Satisfaction.

SS = Student Stress.

lends the support to the finding of previous authors [14-16] who found positive relationship between TL and employee job satisfaction; and [16-18] who found negative relationship between TL and employee job stress.

The empirical findings of this paper also suggest that degree of perceived satisfaction of undergraduate and graduate level students is related to the degree of TL used by instructors/professors at the educational institutions. Although results suggest that the perceived stress of

Table 5. Model Summary

Relationship Between TL and SES			
R	R ²	Adjusted R ²	S.E.E.
0.749 ^a	0.562	0.557	0.665
Relationship Between TL and SS			
R	R ²	Adjusted R ²	S.E.E.
0.257 ^b	0.066	0.057	0.971
Relationship Between TL and SES (Undergraduate Program: B.S.B.A./B.Com.)			
R	R ²	Adjusted R ²	S.E.E.
0.736 ^c	0.542	0.537	0.715
Relationship Between TL and SS (Undergraduate Program: B.S.B.A./B.Com.)			
R	R ²	Adjusted R ²	S.E.E.
0.475 ^d	0.226	0.218	0.882
Relationship Between TL and SES (Graduate Program: M.B.A.)			
R	R ²	Adjusted R ²	S.E.E.
0.763 ^e	0.582	0.578	0.618
Relationship Between TL and SS (Graduate Program: M.B.A.)			
R	R ²	Adjusted R ²	S.E.E.
0.035 ^f	0.001	-0.008	0.997

S.E.E. = Standard error of the estimate

^aPredictors (Relationship between TL and SES): (Constant), Program, TL.

^bPredictors (Relationship between TL and SS): (Constant), Program, TL.

^cPredictors (Relationship between TL and SES - Undergraduate Program): (Constant), TL.

^dPredictors (Relationship between TL and SS - Undergraduate Program): (Constant), TL.

^ePredictors (Relationship between TL and SES - Graduate Program): (Constant), TL.

^fPredictors (Relationship between TL and SS - Graduate Program): (Constant), TL.

undergraduate level students is negatively related to the improvement in the level of perceived TL used by their instructors/professors, no significant relationship between TL and the stress of graduate level students ($R^2 = 0.226$, $R^2 = 0.001$, respectively) was found. It can be concluded that the maturity of the students does not really matter when it comes to the effect of TL on their perceived level of stress. The differences in R-Squares (R^2) for undergraduate and graduate level students may be because TL is new to the undergraduate level students and graduate level students expect their instructors/professors to use TL anyway. Therefore TL does not impact on the perceived level of stress of graduate level students.

Students play a boundary-spanning role where they interact with many individuals from inside (fellow students, administrative staff, and instructors/professors) and outside (employers) their college/university. This large role set requires students to satisfy frequently variegated needs and expectations of multiple parties (only one of which is their instructor/professor), which leads to student stress and dissatisfaction with education. Student stress and dissatisfaction with education leads to high student turnover which is not in the favor of educational institutions. Therefore, it is important for North American colleges/uni-

versities to increase SES and to reduce SS, which in turn, improves student retention of Asian students.

IMPLEMENTING TRANSFORMATIONAL LEADERSHIP BEHAVIORS

Although TL enhance students’ educational satisfaction and reduces student stress, there are some barriers that can make it difficult to implement TL approaches (e.g., lack of student’s understanding of the course goals and objectives, communication barriers, lack of time, cultural barriers, instructors’ understanding the degree to which transformational leadership needs to be implemented, etc.) [35].

To overcome with above challenges, instructors need to communicate the course goals and objectives to students by “breaking-them-down” for each individual student. They should foster upward as well as downward communication. Practicing effective listening skills (e.g., showing students that you want to listen, being patient, holding your temper, going easy on argument and criticism, and asking relevant questions) can go a long way toward demonstrating respect and concern for students’ personal feelings as well as overcoming communication and cultural barriers. Ultimately, instructors/professors should act as mentors (e.g., educate, advise, coach, support, and encourage) to students

Table 6. ANOVA

Relationship Between TL and SES					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	114.028	2	57.014	128.802	0.000 ^a
Residual	88.972	201	0.443		
Total	203.000	203			
Relationship Between TL and SS					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	13.444	2	6.722	7.128	0.001 ^b
Residual	189.556	201	0.943		
Total	203.000	203			
Relationship Between TL and SES (Undergraduate Program: B.S.B.A./B.Com.)					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	56.294	1	56.294	110.154	0.000 ^c
Residual	47.528	93	0.511		
Total	103.822	94			
Relationship Between TL and SS (Undergraduate Program: B.S.B.A./B.Com.)					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	21.112	1	21.112	27.147	0.000 ^d
Residual	72.324	93	0.778		
Total	93.436	94			
Relationship Between TL and SES (Graduate Program: M.B.A.)					
	Sum of Squares	Df	Mean Square	F	Sig.
Regression	56.963	1	56.963	149.012	0.000 ^e
Residual	40.903	107	0.382		
Total	97.865	108			
Relationship Between TL and SS (Graduate Program: M.B.A.)					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.129	1	0.129	0.130	0.719 ^f
Residual	106.362	107	0.994		
Total	106.491	108			

^aPredictors (Relationship between TL and SES): (Constant), Program, TL.
^bPredictors (Relationship between TL and SS): (Constant), Program, TL.
^cPredictors (Relationship between TL and SES - Undergraduate Program): (Constant), TL.
^dPredictors (Relationship between TL and SS - Undergraduate Program): (Constant), TL.
^ePredictors (Relationship between TL and SES - Graduate Program): (Constant), TL.
^fPredictors (Relationship between TL and SS - Graduate Program): (Constant), TL.

to fully overcome “the degree to which TL needs to be implemented” barriers [35].

All of the above require instructors/professors to internalize the importance of showing genuine concern and respect for students and their learning styles. In practice, although it may be difficult for some instructors/professors to increase their use of these TL behaviors and some students may eye a change in teaching styles with skepticism, the

potential benefits far outweigh the costs, and such behaviors are develop-able. The importance of such a leadership development process, however, must be championed and strongly supported by senior leadership (e.g., the dean) [35].

PRACTICAL IMPLICATIONS

If Asian students perceive that their instructors/professors are using high level TL, SES is perceived as higher level

than if it is perceived as being used at lower level. If Asian students perceive that their instructors/professors are using high level TL, SS is perceived as lower level than if it is perceived as being used at lower level.

RECOMMENDATIONS FOR FUTURE RESEARCH

Although this study clearly shows that SES and decreased SS are the functions of TL, we have not covered all possible factors explaining/predicting SES and SS. The possible additional variables that should be researched in the future research study include:

- The degree to which instructors/professors understand the consequences of using TL and their desire to use it,
- The degree to which instructors/professors understand the desire of their students to accept TL,
- The degree to which students desire to accept TL from their instructors/professors,
- The degree to which instructors/professors understand the SES, and
- The degree to which instructors/professors understand the SS.

Furthermore, as discussed above, a more in-depth look at foreign students' maturity, possible preparation for academic studies, and their personal expectations from their studies may provide additional insight as to their perceptions of satisfaction and stress levels.

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