# Student Self-Efficacy, Student Self-Esteem, and the Transformational Leadership Teaching Style

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This study examined student self-efficacy, student self-esteem, and the transformational leadership teaching style in a higher education setting. There were four subdimensions analyzed in the composite transformational leadership teaching style rating, including: (a) the professor is respected; (b) the professor is motivating; (c) the curriculum is rigorous, and (d) the professor cares. Data were collected digitally (n = 193) using the general self-efficacy scale (Schwarzer & Jerusalem, 1995), the Sorensen self-esteem test (Sorensen, 2006), and the transformational leadership teaching style questionnaire (Pounder, 2017). Statistical significance (p < .05) was found with student self-efficacy; student self-esteem; gender; ethnicity; and birth order.

Keywords: self-efficacy, self-esteem, transformational leadership, higher education, transformational leadership teaching style

#### INTRODUCTION

The full-range model of leadership is comprised of three components: (a) transformational leadership, (b) transactional leadership, and (c) laissez-faire leadership. A person displaying transformational leadership demonstrates this style by utilizing one of four behaviors: (a) idealized influence; (b) inspirational motivation; (c) intellectual stimulation; and (d) individual consideration. Idealized influence is when a leader embodies charisma and strong ethical standards to where followers want to emulate the leader. Inspirational motivation is when a leader exudes passion, encouragement, and influences followers toward the dedication and shared vision of the organization. Intellectual stimulation is when a leader inspires followers to be creative, and innovative, and to challenge organizational beliefs. Lastly, individual consideration is when a leader demonstrates empathy; care; compassion; mentoring; and coaching amongst followers (Bass & Avolio, 1994; Burns, 1978; Green, 2014).

Figure 1 shows the fusion between the transformational leadership style and the transformational leadership teaching style (Bass & Avolio, 1994; Pounder, 2017). The transformational leadership teaching style indicates whether the professor is respected; the professor is motivating; the curriculum is rigorous; and the professor cares (Pounder, 2017). An educator can create a more transformational leadership teaching style environment within any type of course format (e.g., face-to-face, hybrid, digital) by showing a passion for the subject; creating a shared vision for the course; being a positive role model; designing a rigorous course; and being respectful, empathetic, and encouraging with the students. Moreover, the types of student projects and assignments that are developed can create a more transformational leadership teaching style environment, for example, collaborative learning; experiential learning; project-based

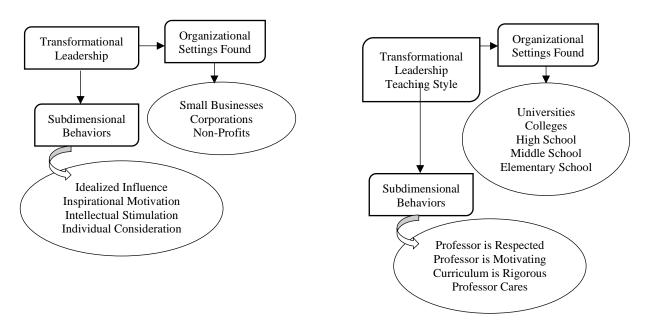
learning; reflection learning; simulations; and problem-based learning (Lê, et al., 2019; Slavich & Zimbardo, 2012; Tahir, 2018). This study examined student self-efficacy, student self-esteem, and the transformational leadership teaching style within a university setting. Demographic items were additionally assessed.

## The Transformational Leadership Teaching Style

Transformational leadership is a leadership style that creates motivational; inspirational; innovative; and respectful organizational cultural environments. The transformational leadership teaching style imitates the transformational leadership style thus creating a more effective learning environment for students. This fusion between the transformational leadership style and the transformational leadership teaching style in the classroom is based on the understanding that educational institutions are sustainable organizations in need of effective educators and successful learning environments for students. Transformational leadership teaching is a style where faculty develop encouraging relationships with students under a shared vision for the course that includes rigor; ethics; inspiration; motivation; sympathy; compassion; and respect. Moreover, professors who use the transformational leadership teaching style provide the space, supplies, and wherewithal for students to develop self-confidence (Boyd, et al., 2019; Gomes et al., 2020; Yüner, 2020).

The transformational leadership style involves a leader-follower relationship found in small businesses, corporations, and non-profit organizations. Whereas, the transformational leadership teaching style involves a teacher-student relationship found within educational settings. Moreover, a professor is a leader in the classroom whether it be within face-to-face, hybrid, or digital course formats. Professors also function as subject-matter experts, and role models, and are charged to create student interest in the subject. The transformational leadership teaching style requires the professor to demonstrate motivation; care; compassion; high ethical standards; inspiration; and respect towards students, for example. Likewise, it includes such behaviors as being prepared for class; implementing effective teaching strategies; having high-quality interpersonal communication skills; and possessing the ability to influence and empower students in a productive manner (DeDeyn, 2021; Noland & Richards, 2014).

FIGURE 1
FUSION BETWEEN THE TRANSFORMATIONAL LEADERSHIP STYLE AND THE TRANSFORMATIONAL LEADERSHIP TEACHING STYLE



#### **Student Self-Efficacy**

Self-efficacy is the belief that a person has regarding the ability to perform and complete a task. Self-efficacy is also an essential part of a student's ability to accomplish and achieve educational goals within an academic setting. Student self-efficacy along with active classroom engagement are motivating factors toward the academic success of the student. Additionally, having harmonious faculty-student relations contributes to a student's belief in self-efficacy. This social capital networking element contributes to students feeling welcome within a collegiate environment. Students who feel appreciated in educational classrooms and who have positive classroom experiences are then more likely to graduate. Furthermore, even with similar backgrounds, knowledge, and skillsets; these same students will perform academically differently based on their positive or negative self-efficacy beliefs and perceptions (Bandura, 1994; Beatson et al., 2020; Ferguson, 2021; Foster & Bernstein, 2021; Olivier, 2019).

Self-efficacy is not only important to student learning, but also to organizational educational outcomes. Students develop stronger self-efficacy perceptions in the classroom when mastering the subject matter; experiencing positive professional and personal connections; having encouraging social influences, and cultivating healthy emotional and psychological points-of-views. Moreover, the professor in the classroom is an influential force amongst the students. For example, the grades; feedback; support, and encouragement the professor gives the student is an important part of developing this socially influential environment. These types of affirmative professor–student interactions are pivotal in shaping a student's self-efficacy awareness and belief system. Additionally, having effective social exchanges is particularly beneficial for students who are underperforming in the class (Barouch-Gilbert, 2016; Klassen, 2004; Won et al., 2017).

#### **Student Self-Esteem**

Self-esteem contains both the positive and negative feelings a person has about oneself. It is the self-perception a person has regarding having feelings of self-worth, self-satisfaction, and self-gratification (Valizadeh, et al., 2016). The self-esteem that students bring into the classroom can be impacted by how the professor treats the students. For example, a professor who uses constructive teaching and classroom management behaviors will contribute to the success the student has both academically and socially (Akin & Radford, 2018; Burch et al., 2018). Likewise, the peer relationships students form in the class can also contribute to having more heightened feelings of self-esteem. This is even more so true if these peer relationships provide positive engagement experiences; provide a sense of belonging; harvest feelings of connectedness, as well as, generate feelings that the student is a valued member of the classroom and university at large (Penner, et al., 2021).

When students are not performing well academically it can create negative outcomes such as low self-esteem; depression; anxiety; fear; and stress (Brown & Marshall, 2006; Uzun et al., 2020). How a professor interacts with students, such as, providing positive reinforcement and promoting students on having feelings of positive self-esteem, well-being, and mental health, builds a better learning environment. Also, when professors support students psychologically including their need to be independent, to feel competent, and to have a sense of belonging; student self-esteem is higher. Additionally, student peer groups can also influence students' self-esteem positively or negatively depending on how healthy the peer group relationships are (Mantasiah, et al., 2021; Marshik, et al., 2017; Mujiyati & Adiputra, 2018; Trusz, 2018).

#### THEORETICAL BACKGROUND AND FRAMEWORK

The theoretical background and framework used in this study included the Bandura self-efficacy theory (Bandura, 1997, 1986, 1997), the William James formula for self-esteem (James, 2017), and the transformational leadership style found within the full-range model of leadership theory (Bass & Avolio, 1994). The Bandura self-efficacy theory encompasses the belief and perseverance that a person has in achieving goals regardless of what obstacles may arise. The William James formula for self-esteem takes into consideration a person's feelings regarding self-worth but then couples that with the individual's achievements. This combination determines the person's self-esteem. The full-range model of leadership theory consists partly of the transformational leadership style which has four subdimensions to include (a)

idealized influence; (b) inspirational motivation; (c) intellectual stimulation; and (d) individual consideration. The other two parts of the full-range model of leadership include transactional leadership and laissez-faire leadership which are mentioned further in the limitations and future research section of this paper.

#### **RESEARCH QUESTIONS (RQ)**

The following research questions (RQ) guided this study.

**RQ1:** What impact does students' self-efficacy have on the transformational leadership teaching style rating including the four subdimensions of the professor is respected; the professor is motivating; the curriculum is rigorous, and the professor cares?

**RQ2:** What impact does students' self-esteem have on the transformational leadership teaching style rating and its four subdimensions?

**RQ3:** What impact do students' demographics of age; ethnicity; marital status; Veteran status; birth order; income level; political affiliation; and education level have on the professor's transformational leadership teaching style rating and its four subdimensions?

**RQ4:** What impact do students' demographics of age; ethnicity; marital status; Veteran status; birth order; income level; political affiliation; and education level, have on students' self-efficacy rating?

**RQ5:** What impact do students' demographics of age; ethnicity; marital status; Veteran status; birth order; income level; political affiliation; and education level, have on students' self-esteem rating?

#### **METHOD**

#### **Research Instruments**

The research instruments used in this study were the general self-efficacy scale (Schwarzer & Jerusalem, 1995), the Sorensen self-esteem test (Sorensen, 2006), and the transformational leadership teaching style questionnaire (Pounder, 2017). The transformational leadership teaching style questionnaire provided an overall rating (composite score) on the transformational leadership teaching style, but also measured four subdimensions: (a) the professor is respected; (b) the professor is motivating; (c) the curriculum is rigorous, and (d) the professor cares. Demographic items were likewise assessed. The survey was administered in one form using the Qualtrics web-based platform. The survey had five sections, including the consent; student self-efficacy; student self-esteem; transformational leadership teaching style; and demographics, totaling 113 items.

### **Participants**

The sample size consisted of 193 students taken from two undergraduate business classes. Students were given time in class to complete the digital survey in a nearby computer lab on campus. Extra credit was provided to encourage participation.

## Alternative Hypotheses $(H_a)$

The author tested the following five alternative hypotheses.

 $H_{Ia}$ : There is a significant relationship between student self-efficacy and the professor's transformational leadership teaching style rating to include the four subdimensions of the professor is respected; the professor is motivating; the curriculum is rigorous, and the professor cares.

 $H_{2a}$ : There is a significant relationship between student self-esteem and the professor's transformational leadership teaching style rating to include the four subdimensions of the professor is respected; the professor is motivating; the curriculum is rigorous, and the professor cares.

 $H_{3a}$ : There is a significant relationship with the student demographics of age; ethnicity; marital status; Veteran status; birth order; income level; political affiliation; and education level, and the professor's transformational leadership teaching style rating to include the four subdimensions of the professor is respected; the professor is motivating; the curriculum is rigorous, and the professor cares.

 $H_{4a}$ : There is a significant relationship with the student demographics of age; ethnicity; marital status; Veteran status; birth order; income level; political affiliation; education level, and student self-efficacy.

 $H_{5a}$ : There is a significant relationship with the student demographics of age; ethnicity; marital status; Veteran status; birth order; income level; political affiliation; education level, and student self-esteem.

#### STATISTICAL ANALYSIS

Data cleaning was initiated to uncover missing values and outliers. Eleven cases were dropped from the original sample size of 204, and there were no outliers found. The final sample size consisted of 193. G\*Power 3 was used to validate the suitability of the sample (Ahmad, et al., 2018). Using the sample size of 193, effect size of f = 0.295, alpha of 0.05, non-centrality parameter of  $\lambda = 16.796$  [ $F_{crit}(5, 187)$ ] = 2.262, the power was 0.897 > 0.80. This indicated that the sample size was greater than the minimum expected, and therefore, the sample was representative.

Cronbach's Alpha was computed with the minimum acceptable reliability alpha of 0.70 being sought (Field, 2018; Kilic, 2008). All scales were reliable due to none of the coefficients being less than the minimum 0.70. The Average Variance Extracted (AVE) (Hox, 2013; Kline, 2016) was used to test for convergent validity, and all coefficients were greater than the minimum expected 0.60. The Heterotrait-Monotrait (HTMT) ratio was used to test for discriminant validity and none of the HTMT coefficients were greater than the maximum required 0.85 (Brown, 2015; Fox et al., 2012; Kline, 2016). Therefore, the research constructs were confirmed to be reliable and valid.

The scales were then summarized using the mean as the measure of central tendency, and standard deviation, kurtosis, and skewness were used as measures of dispersion. To test the first three hypotheses multiple regression was used. Student self-efficacy and student self-esteem were confirmed to have statistically significant relationships with the composite transformational leadership teaching style rating.

Multivariate analysis of variance (MANOVA) was then carried out to further test the effect of student self-efficacy and student self-esteem on the transformational leadership teaching style subdimensions of the professor is respected; the professor is motivating; the curriculum is rigorous, and the professor cares. Both variables were statistically significant, with the Wilks' Lambda for student self-efficacy being greater than that for student self-esteem.

To test the fourth and fifth hypotheses regarding the effects the demographic variables had on student self-efficacy and student self-esteem, a one-way analysis of variance (ANOVA) was implemented. The only significant demographic variable for student self-efficacy was gender, and for student self-esteem, it was ethnicity and birth order. Lastly, the Tukey test was used to determine statistically different groups within birth order. IBM SPSS v28 was used for this study's statistical data analysis.

#### **RESULTS**

## **Demographic Characteristics**

The highest demographic frequencies by category were males (53.9%); 18 - 25 year old's (71.5%); White ethnicity (76.2%); single marital status (65.8%); non-Veteran (94.8%); middle child birth order

(34.7%); annual income level < \$35,000 (38.9%); independent political affiliation (38.3%); some college education (65.3%); and childfree as a family status (56.5%).

## **Descriptive Summaries**

The mean for student self-efficacy was determined with 10 items based on a 4-point Likert scale where 1 = not true at all, to 4 = exactly true. Students rated themselves moderately high on self-efficacy (M = 32.99; SD = 4.431). The mean for student self-esteem was determined with 50 items whereas selecting 0 - 4 items = you have fairly good self-esteem, and up to 19 - 50 items selected = you have severely low self-esteem. The students rated themselves with fairly good self-esteem (M = 2.26; SD = 0.983). The mean for the transformational leadership teaching style rating was determined with 45 items based on a 4-point Likert scale where 0 = strongly disagree, to 4 = strongly agree. The professor was rated high on transformational leadership teaching (M = 3.81; SD = 1.906). The highest mean ratings regarding the transformational leadership teaching style subdimensions were the professor is motivating (M = 3.28; SD = 0.691); followed by the professor cares (M = 3.13; SD = 0.881); the professor is respected (M = 3.09; SD = 0.713); and the curriculum is rigorous (M = 2.94; SD = 0.806).

## **Hypothesis Testing**

The first-third hypotheses sought to establish statistical significance with student self-efficacy; student self-esteem; demographics; and the transformational leadership teaching style and subdimensions. Since multiple variables were being tested for potential influences on the transformational leadership teaching style, according to Field (2018), multiple regression was the optimum test. As shown in Table 1, the regression coefficient for the model was 0.485 showing a moderate relationship, and nearly 24% of the variance in the transformational leadership teaching style rating was explained by the independent variables. The model Goodness-of-Fit Test had a p < 0.05, indicating the model fit the data well.

TABLE 1 REGRESSION MODEL SUMMARY

Model			R	$\mathbb{R}^2$	R <sup>2</sup> (adj)	SE
1			.485	.235	.222	1.885
Model		SS	df	MS	F	p
1	Regression	185.552	12	15.463	4.352	.003 <sup>b</sup>
	Residual	639.617	180	3.553		
	Total	697.285	192			

As shown in Table 2, the regression results indicated that the highest influence on the transformational leadership teaching style was student self-efficacy ( $\beta = 0.205$ ; p = 0.007). Student self-esteem was likewise statistically significant ( $\beta = 0.134$ ; p = 0.042). However, no significant relationships were found amongst the demographic variables.

TABLE 2 REGRESSION COEFFICIENTS

		Unstandardized		Standardized	t	р
Model		В	SE	Beta		
1	(Constant)	510	1.902		268	.789
	Student Self-Efficacy	.088	.032	.205	2.743	.007
	Student Self-Esteem	.066	.145	.134	2.058	.042
	Gender	314	.297	082	-1.057	.292
	Age	036	.162	017	223	.823

Ethnicity	.178	.148	.095	1.203	.231
Marital Status	.108	.085	.094	1.265	.208
Veteran Status	.462	.636	.054	.727	.468
Birth Order	050	.156	024	321	.749
Income Level	066	.069	072	952	.343
Political Affiliation	.173	.191	.070	.907	.366
Education Level	.154	.198	.058	.779	.437
Family Size	146	.107	105	-1.371	.172

The first and second hypotheses were further tested using the significant predictors of student self-efficacy, student self-esteem, and the four transformational leadership teaching style subdimensions of the professor is respected; the professor is motivating; the curriculum is rigorous, and the professor cares. Since there were two independent variables, and four dependent variables, according to Byrne (2016) and Finch and Bolin (2017), a MANOVA was the optimum statistical approach. The results showed that both independent variables were statistically significant, with the most being from student self-efficacy whose Wilks' lambda was  $\Lambda = 0.917$  [F(4, 187) = 4.205, p = 0.003,  $\eta^2 = 0.083$ ], and then student self-esteem whose Wilks' lambda was  $\Lambda = 0.940$  [F(4, 187) = 2.988, p = 0.020,  $\eta^2 = 0.060$ ]. The results of the between-subjects effects are presented in Table 3.

TABLE 3
TESTS OF BETWEEN-SUBJECTS EFFECTS

Source	Dependent Variable	SS	df	MS	F	p	$\eta^2$
Corrected Model	Professor is Respected	2.993a	2	1.496	3.006	.052	.031
	Professor is Motivating	9.122 <sup>b</sup>	2	4.561	10.492	.000	.099
	Curriculum is Rigorous	$8.890^{\circ}$	2	4.445	7.296	.001	.071
	Professor Cares	$5.980^{d}$	2	2.990	3.968	.020	.040
Self-Efficacy	Professor is Respected	1.482	1	1.482	2.977	.086	.015
	Professor is Motivating	5.251	1	5.251	12.080	.001	.060
	Curriculum is Rigorous	4.129	1	4.129	6.776	.010	.034
	Professor Cares	4.004	1	4.004	5.314	.022	.027
Self-Esteem	Professor is Respected	1.172	1	1.172	2.354	.127	.012
	Professor is Motivating	2.868	1	2.868	6.597	.011	.034
	Curriculum is Rigorous	3.750	1	3.750	6.155	.014	.031
	Professor Cares	1.365	1	1.365	1.812	.180	.009
Error	Professor is Respected	94.578	190	.498			
	Professor is Motivating	82.596	190	.435			
	Curriculum is Rigorous	115.766	190	.609			
	Professor Cares	143.157	190	.753			
Total	Professor is Respected	1944.250	193				
	Professor is Motivating	2166.188	193				
	Curriculum is Rigorous	1794.813	193				
	Professor Cares	2039.375	193				

a. R-Squared = .031 (Adjusted R-Squared = .020)

Student self-efficacy had significant relationships with three of the four transformational leadership teaching style subdimensions. The highest effect was with the professor is motivating  $[F(1, 190) = 12.080, p = 0.001, \eta^2 = 0.060]$ , followed by the curriculum is rigorous  $[F(1, 190) = 6.776, p = 0.010, \eta^2 = 0.034]$ ,

b. R-Squared = .099 (Adjusted R-Squared = .090)

c. R-Squared = .071 (Adjusted R-Squared = .062)

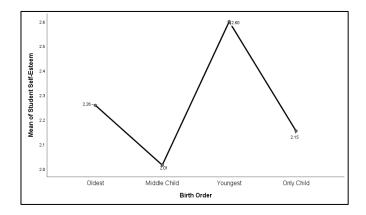
d. R-Squared = .040 (Adjusted R-Squared = .030)

and then the professor cares  $[F(1, 190) = 5.314, p = 0.022, \eta^2 = 0.027]$ . Student self-esteem had significant relationships with two of the four transformational leadership teaching style subdimensions. The highest effect was with the professor is motivating  $[F(1, 190) = 6.597, p = 0.011, \eta^2 = 0.034]$ , followed by the curriculum is rigorous  $[F(1, 190) = 6.155, p = 0.014, \eta^2 = 0.031]$ .

## Effect of Demographics on Student Self-Efficacy and Self-Esteem

To address the fourth and fifth hypotheses, an analysis of variance (ANOVA) was used to test the effect of the demographic variables of age; ethnicity; marital status; Veteran status; birth order; income level; political affiliation; and education level on student self-efficacy and student self-esteem. The overall ANOVA result was F(5,187) = 2.344, p = 0.04, and therefore statistically significant. The only demographic variable that had a statistically significant difference in student self-efficacy was gender. Males had a slightly higher rating (M = 33.76; SD = 4.158) over females (M = 32.10; SD = 4.593), F(1, 191) = 6.927, p = 0.01. Regarding student self-esteem, there were two significant demographic variables, and these were ethnicity and birth order. Considering student self-esteem across ethnicity, Asians had the highest rating (M = 2.71; SD = 0.849) followed by Whites (M = 2.29, SD = 0.981) and Hispanics (M = 2.29; SD = 1.380). Blacks (M = 1.80; SD = 0.768), Middle Easterners, and American Indians had the least mean rating of 1.00. There was also a statistically significant difference in student self-esteem across birth order, with the youngest having the highest rating (M = 2.60; SD = 0.955); followed by the oldest (M = 2.26, SD = 1.052); the only child (M = 2.15; SD = 1.068); and lastly, the middle child (M = 2.01; SD = 0.862). The overall ANOVA result was F(3, 189) = 3.789, p = 0.01, and therefore statistically significant. The distribution of student self-esteem by birth order is illustrated in Figure 2.

FIGURE 2
DISTRIBUTION OF STUDENT SELF-ESTEEM BY BIRTH ORDER



## LIMITATIONS AND FUTURE RESEARCH

This study did not come without limitations. For example, the students in this sample did a self-rating regarding their self-efficacy and self-esteem beliefs and perceptions. Therefore some students may have overstated the self-efficacy items and understated the self-esteem items. Additionally, due to the lack of prior research regarding the combination of analyzing student self-efficacy, student self-esteem, and the transformational leadership teaching style and its subdimensions, it is recommended that future researchers continue developing this area further to help minimize this gap in the literature.

It is also recommended that future research studies examine the other two parts of the full-range model of leadership (Bass & Avolio, 1994) including transactional leadership and laissez-faire leadership, and how professors who exhibit these two types of leadership behaviors in the classroom impact student self-efficacy, student self-esteem, and professor ratings. Other future research topics include examining why certain student ethnicities have higher self-esteem over others. Additionally, it is further suggested that

future research examine how professors from different United States cultures impact students' perceptions of the professor positively or negatively. For example, in this study, the professor was from the Deep South and the students were from the North. Lastly, further research studies are needed regarding the impact gender has on students' professor ratings and provide remedies to this.

#### VALUE TO THE PRACTICE

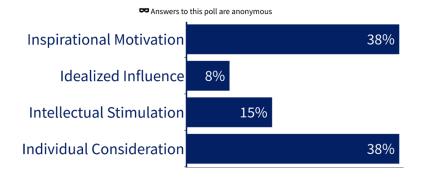
The value that this study brings to the higher education industry is that even faced with professional and personal life challenges, students do believe in themselves and their abilities to perform and be successful in college (Gagné, 2018; Marazziti, et al., 2019). This study also showed that a professor who is more mindful of teaching using a transformational leadership style can impact students' self-efficacy and students' self-esteem beliefs and perceptions, as well as, the professor and course ratings.

#### DISCUSSION

This study examined student self-efficacy, student self-esteem, and the transformational leadership teaching style. Prior research in this area is lacking. However, this study provided statistically significant findings to help develop this scholarly area more fully. Initial baseline results indicated that the students rated themselves moderately high in self-efficacy and with fairly good self-esteem. This was a surprising find since the professor initially thought the students would not score as high in both areas of self-efficacy and self-esteem. The professor was likewise rated high on the composite transformational leadership teaching style score. The professor did expect to be rated high on the transformational leadership teaching style since she was intentionally putting a mindful effort into being a more transformational leader in the classroom.

Moreover, at the beginning of each 16-week business course, the professor explained the fusion between transformational leadership (Bass & Avolio, 1994) and the transformational leadership teaching style (Pounder, 2017). The professor then completed a focus group poll using the digital platform Poll Everywhere and asked the students to rate her abilities in being a transformational leader in the classroom. Surprisingly, as shown in Figure 3, the focus group poll results taken at the beginning of the semester did match the quantitative results of this study when data was collected and analyzed at the end of the semester using instrument-driven processes.

FIGURE 3
BASELINE FOCUS GROUP POLL EVERYWHERE RESULTS IN THE PROFESSOR BEING A
TRANSFORMATIONAL LEADER IN THE CLASSROOM



Regarding the instrument-driven quantitative results of this study and the four subdimensions of the transformational leadership teaching style, the professor was rated highest on being motivating (e.g., inspirational motivation), followed by professor cares (e.g., individual consideration). The professor was rated lower on being respected (e.g., idealized influence) by the students and with the class being rigorous

(e.g., intellectual stimulation). It was disappointing to the professor to be rated lower on being respected by the students and the course being rigorous since much time and effort was put into both of these business courses inside and outside the classroom. Also, the professor was armed with the focus group results from the beginning of the semester and made intentional efforts to be more idealized influential and make the business courses more rigorous.

The professor suspects that being female could have potentially contributed to being rated lower on being respected by the students, as well as, the courses being rigorous since research shows that men are rated higher on course evaluations over women and are respected more by their students, thus creating gender bias (Boring 2017; MacNell et al., 2015; Martin, 2016; Mitchell & Martin, 2018; Rosen, 2017). The professor further suspects that being from the Deep South and the university that this study was taken at being from up North could have also contributed negatively to having lower scores in the professor is respected and the course is rigorous subdimensions of the transformational leadership teaching style.

#### **CONCLUSION**

Five alternative hypotheses were created for this study. The first and second hypotheses were tested to see if there were statistically significant findings with student self-efficacy, student self-esteem, and the professor's transformational leadership teaching style including its four subdimensions of professor is respected; the professor is motivating; the curriculum is rigorous, and the professor cares. The null hypotheses were rejected since there were significant findings with student self-efficacy, student self-esteem, and the transformational leadership teaching style.

The third hypothesis examined the participant demographics of age; ethnicity; marital status; Veteran status; birth order; income level; political affiliation; and education level, and the transformational leadership teaching style and its subdimensions. There were no statistically significant findings with the demographic variables and the transformational leadership teaching style, thus the null hypothesis was accepted. Lastly, the fourth and fifth hypotheses examined the demographics with student self-efficacy and student self-esteem. There were statistically significant findings found with self-efficacy and gender, as well as, self-esteem and ethnicity, and birth order. Thus, the null hypotheses were partially rejected.

In closing, students are coming into the classroom having feelings of high self-efficacy and high self-esteem hence believing in themselves to achieve and accomplish their academic goals. Moreover, the demographic makeup of the student does not determine professor end-of-course ratings. Males did show slightly higher self-efficacy scores over females in this study. It is important to keep developing girls and women towards having strong self-efficacy beliefs and perceptions. The Asian, White, and Hispanic student ethnicities reported having the highest self-esteem ratings. The reason for the lower self-esteem reported by the other ethnic groups including Blacks, Middle Easterners, and American Indians was not determined in the scope of this study. One could speculate that prejudices amongst these ethnic groups could be a factor. The author suggests that a society of people living without biases would be ideal.

Lastly, the youngest child in birth order reported having the highest self-esteem. Parents need to continue to work on developing all of their children's self-esteem, value, and worth regardless of birth order. The author further suggests not spoiling or favoring a certain child over others, as this can impact the other children's self-esteem negatively (Bulanda & Majumdar, 2008; Johnson, 2014; Parker & Benson, 2004). Additionally, the professor is motivating was rated the highest and the author speculates that integrating a more transformational leadership teaching style in the classroom will cultivate a more motivating persona. Student self-efficacy was more influential than student self-esteem. Educational systems need to do more to assist with building the self-esteem of their students that are enrolled, as well as, parents need to likewise be doing this at home. Lastly, based on this study, there seems to still be gender bias in the classroom with female professors being respected by their students and feeling challenged by the course material. Breaking down these gender biases with educational institutions and industry support is vital moving forward, and also vital for female professors' careers, livelihood, and well-being.

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#### REFERENCES

- Ahmad, W., Ibrahim, M., Husein, A., & Khamis, M. (2018). Sample Size Calculation Made Easy Using G\*Power. Penerbit USM, Malaysia.
- Akin, I., & Radford, L. (2018). Exploring the development of student self-esteem and resilience in urban schools. Contemporary Issues in Education Research, 11(1), 15–22.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191–215.
- Bandura, A. (1986). Social foundations of thought and action. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1994). Self-efficacy. In V.S. Ramachaudran (Ed.), Encyclopedia of human behavior (Vol. 4, pp. 71–81). New York: Academic Press. (Reprinted in H. Friedman [Ed.], Encyclopedia of mental health. San Diego: Academic Press, 1998).
- Bandura, A. (1997). Self-efficacy: The exercise of control. New York: Freeman.
- Barouch-Gilbert, A. (2016). Academic probation: Student experiences and academic probation: Student experiences and self-efficacy enhancement. Journal of Ethnographic & Qualitative Research, *10*(3), 153–164.
- Bass, B.M., & Avolio, B.J. (1994). Improving organizational effectiveness through transformational leadership. Sage Publications.
- Beatson, N.J., Berg, D., & Smith, J. (2020). The influence of self-efficacy beliefs and prior learning on performance. Accounting & Finance, 60(2), 1271–1294.
- Boring, A. (2017). Gender biases in student evaluations of teaching. Journal of Public Economics, 145,
- Boyd, B.L., Getz, C.A., & Guthrie, K.L. (2019). Preparing the leadership educator through graduate education. New Directions for Student Leadership, (164), 105–121.
- Brown, J.D., & Marshall, M.A. (2006). The three faces of self-esteem. Self-Esteem: Issues and Answers, pp. 4–9.
- Brown, T.A. (2015). Confirmatory factor analysis for applied research (2<sup>nd</sup> edition). New York: Guilford Publications.
- Bulanda, R.E., & Majumdar, D. (2009). Perceived parent-child relations and adolescent self-esteem. Journal of Child and Family Studies, 18(2), 203–212. DOI: 10.1007/s10826-008-9220-3
- Burch, G.F., Batchelor, J.H., Burch, J.J., Gibson, S., & Kimball, B. (2018). Microaggression, anxiety, trigger warnings, emotional reasoning, mental filtering, and intellectual homogeneity on campus: A study of what students think. *Journal of Education for Business*, 93(5), 233–241.
- Burns, J.M. (1978). Leadership. Harper & Row.
- Byrne, B.M. (2016). Structural equation modeling with AMOS: Basic concepts, applications, and programming (3<sup>rd</sup> edition). Mahwah, NJ: Erlbaum.
- DeDeyn, R. (2021). Teacher leadership and student outcomes in a US university intensive English program. The Electronic Journal for English as a Second Language, 24(4), 1–23.
- Ferguson, N.S. (2021). Effects of faculty and staff connectedness on student self-efficacy. Journal of the Scholarship of Teaching & Learning, 21(2), 58–78.
- Field, A.P. (2018). Discovering statistics using SPSS. London, England: SAGE.
- Finch, W.H., & Bolin, J.E. (2017). Multilevel modeling using Mplus. Boca Raton, FL: Taylor & Francis Group.
- Foster, V., & Bernstein, J. (2021). Association between faculty and student self-efficacy and attitudes toward evidence-informed practice [Abstract]. Journal of Higher Education Theory & Practice, 21(5), 104–114.

- Fox, J., Byrnes, J.E., Boker, S., & Neale, M.C. (2012). Structural equation modeling in R with the sem and OpenMx packages. *Handbook of Structural Equation Modeling*, pp. 325–340. New York: Guilford Press.
- Gagné, A. (2018). Flexible profession: How much can we bend? *English Studies in Canada*, 44(4), 47–50.
- Gomes, M.E., Kime, L., Bush, J.M., & Myers, A.B. (2020). The electronic media fast and student well-being: An exercise in transformational teaching. *Teaching of Psychology*, pp. 1–7.
- Green, M.T. (2014). *Graduate leadership: A review of the science of leadership* (Second ed.). CreateSpace and Leadership Studies.
- Hox, J.J. (2013). Multilevel regression and multilevel structural equation modeling. *The Oxford Handbook of Quantitative Methods*, pp. 281–294. New York: Oxford University Press.
- James, W. (2017). The principles of psychology. Pantianos Classics.
- Johnson, S. (2014). *Investigating the effects birth order has on personality, self-esteem, satisfaction with life and age* [Thesis, Dublin Business School].
- Kilic, A. (2018). Can factor scores be used instead of total score and ability estimation? *International Journal of Assessment Tools in Education*, 6(1), 25–35.
- Klassen, R.M. (2004). A cross-cultural investigation of the efficacy beliefs of South Asian immigrant and Anglo Canadian nonimmigrant early adolescents. *Journal of Educational Psychology*, 96(4), 731–742.
- Kline, R.B., (2016). *Principles and practice of structural equation modeling* (4<sup>th</sup> edition). New York/London: Guilford.
- Lê, N.-L., Hinestroza, J.M., Kraus, E.B., Hassan, A., & Plough, I.C. (2019). A catalyst of change: A graduate student's perspectives on transformational teaching. *FIRE: Forum for International Research in Education*, 6(2), 97–119.
- MacNell, L., Driscoll, A., & Hunt, A.N. (2015). What's in a Name: Exposing Gender Bias in Student Ratings of Teaching. *Journal of Collective Bargaining in the Academy*, 0, Article 53.
- Mantasiah, R., Yusri, Sinring, Abdullah, A., & Aryani, F. (2021). Assessing verbal positive reinforcement of teachers during school from home in the covid-19 pandemic era. *International Journal of Instruction*, *14*(2), 1037–1050.
- Marazziti, D., Mucci, F., Piccinni, A., Dèttore, D., & Pozza, A. (2019). Covid-19 outbreak: A challenge calling for early intervention on contamination obsessive fears? *BPA Applied Psychology Bulletin*, 67(285), 62–70.
- Marshik, T., Ashton, P., & Algina, J. (2017). Teachers' and students' needs for autonomy, competence, and relatedness as predictors of students' achievement. *Social Psychology of Education*, 20(1), 39–67.
- Martin, L. (2016). Gender, teaching evaluations, and professional success in political science. *PS: Political Science & Politics*, 49(2), 313–319.
- Mitchell, K. & Martin, J. (2018). Gender bias in student evaluations. *PS: Political Science & Politics*. 51(3), 648–652.
- Mujiyati, M., & Adiputra, S. (2018). Influence of peer groups to the self-esteem of Lampung and Javanese students. *International Journal of Psychology and Educational Studies*, 5(1), 15–22.
- Noland, A., & Richards, K. (2014). The relationship among transformational teaching and student motivation and learning. *Journal of Effective Teaching*, 14(3), 5–20.
- Olivier, E., Archambault, I., De Clerco, M., & Galand, B. (2019). Student self-efficacy, classroom engagement, and academic achievement: Comparing three theoretical frameworks. *Journal of Youth & Adolescence*, 48(2), 326–340.
- Parker, J.S., & Benson, M.J. (2004). Parent-adolescent relations and adolescent functioning: self-esteem, substance-abuse, and delinquency. *Adolescence*, 39, 519–531.
- Penner, K., Giasson, F., De Moissac, D., Prada, K., Rocque, R., & Brochu, P. (2021). Sense of belonging and social climate in an official language minority post-secondary setting. *Canadian Journal of Higher Education*, *51*(4), 26–39.

- Pounder, J. (2017). Transformational leadership teaching style questionnaire.
- Rosen, A.S. (2017). Correlations, trends, and potential biases among publicly accessible web-based student evaluations of teaching: A large scale study of ratemyprofessors.com data. Assessment & Evaluation in Higher Education, 43(1), 31–44.
- Schwarzer, R., & Jerusalem, M. (1995). The general self-efficacy scale.
- Slavich, G.M., & Zimbardo, P.G. (2012). Transformational teaching: Theoretical underpinnings, basic principles, and core methods. Educational Psychology Review, 24(4), 569–608.
- Sorensen, M.J. (2006). Sorensen self-esteem test.
- Tahir, K. (2018). Transformational teaching: Pakistani students' perspectives in the English classroom [Abstract]. International Journal of Teaching and Learning in Higher Education, 30(1), 61–69.
- Trusz, S. (2018). Four mediation models of teacher expectancy effects on students' outcomes in mathematics and literacy. Social Psychology of Education, 21(2), 257–287.
- Uzun, B., Leblanc, S., & Ferrari, J. (2020). Relationship between academic procrastination and selfcontrol: The meditational role of self-esteem. College Student Journal, 54(3), 309–316.
- Valizadeh, L., Zamanzadeh, V., Gargari, R., Ghahramanian, A., Tabrizi, F., & Keogh, B. (2016). Selfesteem challenges of nursing students: An integrative review. Research & Development in *Medical Education*, 5(1), 5–11.
- Won, S., Lee, S., & Bong, M. (2017). Social persuasions by teachers as a source of student self-efficacy: The moderating role of perceived teacher credibility [Abstract]. Psychology in the Schools, 54(5), 532-547.
- Yüner, B. (2020). Transformational teaching in higher education: The relationship between the transformational teaching of academic staff and students' self-efficacy for learning. Educational Policy Analysis and Strategic Research, 15(4), 350–366.