Journal of Basic Education Research
Vol. 1, No. 1, January 2025, pp. 47~56
ISSN: 2716-3725, DOI: 10.37251/jber.v6i1.1421

How Principals' Instructional Leadership Influence Teachers' Self-Efficacy

Sopheng Tep[1], Ratana Loch[2], Visalboth Pok[3]
[1, 2, 3] The University of Cambodia, Phnom Penh, Cambodia

Article Info

Article history:
Received Oct 08, 2024
Revised Jan 07, 2024
Accepted Jan 21, 2025
OnlineFirst Jan 24, 2025

Keywords:

Principal Instructional Leadership
Teachers' Self-Efficacy
Teachers' Perceptionn

ABSTRACT

Purpose of the Study: This study focuses on evaluating the degree of TEP of PIL on TSE in Cambodia. It also seeks to identify how TEP on PIL varies according to different demographic characteristics. Furthermore, the researcher aims to uncover whether teachers' demographic characteristics influence their perception of instructional leadership from their principals.

Methodology: The researcher employed descriptive statistics to measure TEP on PIL and used independent sample t-tests and one-way ANOVA to examine differences in TEP on PIL across various demographic characteristics. A total of 295 PJHSTs participated in this study, all of whom were pursuing higher education degrees at a private university in Phnom Penh.

Main Findings: The results of the research indicate that PJHSTs have diverse perceptions of PIL. These positive perceptions suggest that PIL significantly influences TSE. Additionally, the findings revealed that teachers' gender had a significant impact on their perceptions of PIL ($p < 0.05$). However, no significant impact of gender differences on TSE was found. The study also highlighted additional findings, as presented in the results section.

Novelty/Originality of the Study: These findings provide valuable insights into fostering TSE through effective PIL in Cambodian school context. PIL emerges as a critical factor in enhancing TSE, as teachers with high self-efficacy tend to perform their teaching tasks more effectively. Consequently, school principals, academic staff, teachers, and other stakeholders can apply these findings to improve institutional success. Future research should explore other leadership styles and additional factors that may influence TSE.

Corresponding Author:
Sopheng Tep,
The University of Cambodia,
Northbridge Road P.O. Box 917 Sangkat Toek Thla, Khan Sen Sok Phnom Penh, Kingdom of Cambodia 12000
Email: sophengtep@yahoo.com

1. INTRODUCTION

Teachers' Self-efficacy (TSE) is one of the most fundamental aspects in creating challenges in educational organizations, as it also brings about innovations and development that speed up a nation's economy and quality of education [1], [2]. TSE refers to the teachers' conviction in their ability to perform tasks with anticipated outcomes, and TSE can enhance educational quality and influence other educators to effectively perform their tasks responsibly and effectively [2], [3]. Highly efficacious teachers planned, coordinated, and reflected more successfully, which made them crucial to an educational organization's goal-achieving [4], [5]. Additionally, the greater the teachers become more tenacious and resilient in performing their teaching duties, the higher their self-efficacy is [6]-[8]. Moreover, each educational institution's success was impacted by the attitudes and beliefs of the teachers. Most importantly, the teacher's flexibility in completing their job was encouraged by the leaders' instructional leadership (LIL) in developing faith in the progress of every educational institution [9].

LIL refers to the authority, ability, encouragement, behavior, and confidence of instructors, principals, directors, and rectors to lead the teaching and non-teaching staff in reaching an educational institute's goal [10]. Their leadership is an essential figure in energizing, sustaining, and supporting the specialized teachers to advance high-quality education as they actively pursue defining the school's goal, enhancing the learning environment, and providing a practical point of view [11], [12]. Additionally, principals'instructional leadership (PIL) referring to LIL, plays the successful leadership role witnessed by teachers who exhibited high efficacy [13], [14]. Besides, the authority to increase trust in the progress of educational organizations was shared by the PIL [15], [16]. Moreover, the PIL exemplifies effective practices for teachers, encouraging them to do their duties competently [17], [18].

There is evidence from previous studies highlighting the influence of PIL on TSE. For example, a study by [19] showed that PIL can promote efficacy among primary school teachers in Iran. Furthermore, PIL is considered a significant factor in supporting teachers in developing their professional learning. [19] suggested that further studies be conducted to explore the relationship between PIL and TSE. Similarly, [3] found a strong positive relationship between school PIL and TSE, emphasizing that school principals or directors are crucial figures in improving TSE, and future research should be enlarged the sample size or use other methods to ensure the generalization of the results. Relatedly, [20] found a significant relationship between school directors and secondary school TSE in Western China. Their study highlighted that TSE increases when principals or directors exhibit effective instructional leadership that earns TSE, and future studies ought to be inflamed the diverse sample size or done in other areas to certify the simplification of the outcomes.

Although these previous studies demonstrated the significant impact of PIL on TSE, [3], [19], [20] addressed the research gaps in their studies for suggesting future research should enlarge sample size, in other areas, and used theories to validate the generality of the consequences. Additionally, research on the relationship between LIL and TSE has not been comprehensively conducted in Cambodia. Furthermore, these studies have not examined in detail the effects of each dimension of CLT on TSE, particularly with teachers' demographic characteristics such as gender, age, and years of teaching experience. Thus, the researcher has decided to study "Principals' Instructional Leadership Influence on Teachers' Self-Efficacy" using Charismatic Leadership Theory (CLT) for PIL as the independent variable and Social Cognitive Theory (SCT) for TSE as the dependent variable. Additionally, the study's objectives are: (a) to evaluate the extent to which PIL influences TSE in Cambodia, and (b) to analyze differences in TEP toward their PIL based on demographic characteristics.

1.1 The CLT Connected to PIL

CLT emphasizes courage, conviction, and enthusiasm in addressing followers with differing opinions about the organization or society [21]. It also involves the leader's ability to unify individuals through identification and submission to their authority [22]. Among various leadership theories, CLT highlights the principles, emotions, motivations, and self-esteem of leaders. Robert House expanded on Max Weber's 1947 concept of charismatic leadership, identifying it as a vital leadership trait [23]. According to [23], [24], [25], charismatic leaders possess three key qualities: Power and Ability (POA), which encompass the leader's authority to guide subordinates effectively and their capability to perform tasks necessary for achieving goals; Motivation and Communication (MOC), where motivation refers to the leader's ability to inspire followers to complete their tasks, and communication involves the efficient exchange of instructions and updates; and Behavior and Self-Confidence (BES), where behavior pertains to the leader's methods of operation in specific situations, and self-confidence reflects the leader's belief in their ability to take actions that achieve objectives.

[26] explored how TSE and job satisfaction were influenced by their ability to observe societal dynamics. Surveying 982 public school teachers, the study found that leaders' shared goals, responsibilities, and inquiry behaviors positively impacted TSE and PIL. Similarly, [27] examined the effects of distributed and instructional leadership on TSE and job satisfaction through a survey of 4,358 teachers from government and non-government schools. Their findings showed a direct positive relationship between PIL and teachers' job satisfaction and TSE. Additionally, [28] investigated the influence of charismatic leadership on teachers' empowerment. The result showed that charismatic leadership can serve as a foundation for a stable school culture, fostering, TSE and commitment to remaining in a particular school for the long term. Furthermore, school principals who implement CLT play a pivotal role in fostering strong relationships among the entire organization, including leaders and educators. Charismatic leadership, along with leadership style, can support teachers emotionally and help them to navigate their multifaceted and challenging responsibilities effectively.

1.2 The SCT Practices Connected to TSE

SCT was derived from Bandura's inferred social learning theory to the SCT, which included cognitive components that were crucial to the learning process and learning factors that were disregarded by earlier incumbents, like thinking and emotions [29], [30]. SCT on efficacy is an effective factor that advocates for the integration of human performance, background, and reasoning aspects, all of which allude to a person's confidence in carrying out their exact responsibilities. SCT suggests that an individual's performance,

background, and reasoning elements are connected with self-efficacy [31]. Self-efficacy, which has four sources, is the conviction that one can carry out duties with happiness or to the expected degree [32].

[33] identified four categories of self-efficacy: mastery experience, vicarious experience (VIE), social persuasion (SOP), and physiological stimulation. Mastery experience involves gaining confidence through overcoming challenges, such as teachers acquiring knowledge and expertise from their teaching practices, which is a key factor in developing teacher efficacy [33]-[35]. VIE refers to learning by observing others perform difficult tasks, as such observation helps individuals improve their skills [36]. SOP emphasizes the importance of receiving constructive feedback and advice from successful individuals, enabling teachers to identify their strengths and weaknesses by seeking input from leaders or colleagues [37], [38]. Lastly, physiological stimulation involves the physical and emotional states that influence individuals' performance, where positive feelings such as enthusiasm enhance efficacy, while negative emotions like anxiety or regret diminish it [39], [40]. In this study, the researcher selected VIE and SOP as dimensions of TSE, the dependent variable.

There were numerous researchers supported the shreds of evidence that CLT has a connection with TSE. So far, the connection between teacher collaboration and principal leadership was investigated [41]. The 630 participants were educators from elementary and intermediate schools. The outcome demonstrated that TSE acts as a moderator between the principal's leadership and a significant indirect correlational influence on teacher collaboration. Additionally, [42] researched organizational commitment and leadership self-efficacy. Academic and administrative members that participated in the survey's data gathering were four hundred. To examine the data, the Pearson correlation coefficient was employed. The results implied a favorable relationship between leaders' affective commitment and their level of self-efficacy. The researcher also adopted a similar analytical stance, believing that followers' good perceptions of the leaders' efficacy were fueled by their positive actions. Furthermore, a study by [43] found that teachers who have high efficacy levels can perform their teaching tasks effectively, and it can also lead to students' positive learning outcomes.

1.3 The PIL and TSE

[44] examined the assessment of the contribution of the impact of PIL and collective TSE on teacher commitment. The design is quantitative research with a sample of 188 primary school educators in Oman. The Principal Instructional Management Rating Scale (PIMRS) was used as the primary tool, derived from [45], to assess principle instructional management, while a twelve-item scale created by [46] and modified by [47] was employed to evaluate collective TSE. The findings demonstrated a moderate positive link between instructional leadership and TSE ($r = 0.60$, $p < 0.01$). Future researchers ought to investigate the correlation between instructional leadership and TSE in other contexts. Moreover, [20] found that fostering a positive school learning environment significantly enhances TSE in Western China, with trust acting as a key mediator between instructional leadership and TSE. This indicates that trustworthy PIL can effectively promote TSE by creating an optimistic and supportive environment. Furthermore, [19] explored the relationship between PIL and TSE. This quantitative study consisted of 121 principals and 886 teachers. The results explained that PIL can influence TSE, and when teachers are highly efficacious, they can develop their professional learning effectively. Hence, PIL also plays a crucial role in enhancing teacher professional development ($\beta = 0.03$; $p < 0.001$). In Cambodian context, [3] discovered a highly positive and significant relationship between PIL and TSE ($r = 0.83$) among 100 lower secondary school teachers. Each dimension of CLT—POA, $r = 0.59$, MOC, $r = 0.60$, and BES, $r = 0.64$—also showed significant correlations with TSE.

2. RESEARCH METHOD

2.1 Research Design

Quantitative research is run in this study since it supports statistical analysis, which provides valuable insights into the influence, strength, and direction of relationships between variables. This approach reduces researcher bias and ensures that conclusions are explained based on statistics rather than researcher' subjective judgment [48].

2.2 Research Population, Sample Size, and Sampling Techniques

Simple random sampling is applied due to its ease of use and practicality. The population consists of 501 individuals, and 295 teachers teaching in Cambodian Public Junior High School Teachers (PJHSTs) were randomly selected as the sample. This sample size selection was chosen based on Krejcie and Morgan's sample calculation (1970) [49]. The researcher selected 126 samples from 201 population in Branch SMC, and 169 samples from 300 population in Branch TK. To select 295 participants, the researcher followed three simple steps. First of all, the researcher requested the student list from the university. Then, the researcher randomly selected participants by simply using the lottery method. Finally, the researcher delivered the survey to the selected sample size.

2.3 Research Instruments and Reliability

Part I of the questionnaire is teachers' Demographic Characteristics: 4 items; part II, Teachers' Perceptional Levels on PIL: 10 items, and part III, PIL on TSE: 10 items. The questionnaire items are adapted from PIMRS by Hallinger in 1982 [50]. Cronbach's Alpha was utilized to measure the dependability of the questionnaire. The researcher conducted the pilot test with a sample of 50 respondents to evaluate the instrument's reliability. A reliability coefficient of 0.70 or above was deemed acceptable [51]. Based on the pilot study, the Cronbach's α (alpha) value of all variables is higher than 0.80 (α of PIL = 0.81, α of TSE = 0.88), which shows that the questionnaire's items are good.

2.4 Data Collection and Analysis

The researcher ensured the questionnaires were distributed to the respondents who were the PJHSTs with clear instructions and closely supervised the process. Afterward, the completed questionnaires were collected, and the data was entered into SPSS (version 26) for analysis. Additionally, descriptive statistics (Mean and Standard Deviation) are used to define the level of teachers' perception (TEP) of the PIL, and the independent sample t-test, and one-way ANOVA is used to compare TEP toward their PIL on TSE in terms of demographic characteristics.

3. RESULTS AND DISCUSSION

3.1 Demographic Characteristics

Among the 295 respondents, there were 198 males participated in the survey. In addition, most respondents, 152 respondents or 51.50 %, aged between 30 to 45 years old. A majority of them (145 respondents or 49.10%) were studying the bachelor's degree. Furthermore, most of the respondents (115 respondents or 39%) had teaching experience between 10 to 20 years.

3.2 What is the level of TEP toward their PIL on TSE in Cambodia?

Table 1. TEP of their PIL

	TEP Levels on PIL Statement	M	S.D.	Meaning	Rank
	POA				
1.	The principal has the authority to make decisions on both teaching and non-teaching tasks.	4.29	0.61	High	2
4.	The principal enforces rules by punishing staff who disobey school regulations and fining vendors selling prohibited food.	3.73	0.85	High	7
7.	The principal demonstrates the ability to perform tasks effectively.	3.72	0.75	High	8
	Total	3.91	0.50	High	2
	MOC				
2.	The principal motivates teachers to use teaching materials freely, and adopt both teacher-centered and student-centered methods.	4.01	0.75	High	5
5.	The principal values and motivates teachers to perform their tasks effectively.	3.63	0.91	High	9
8.	The principal provides verbal and written feedback on teachers' tasks and behavior.	3.58	0.86	High	10
10.	The principal meets individually with teachers to discuss student progress and curriculum execution.	3.92	0.70	High	6
	Total	3.78	0.54	High	3
	BES				
3.	The principal consistently exhibits ethical behavior, including dignity, morality, and virtue, in their duties.	4.31	0.75	High	1
6.	The principal confidently undertakes risky activities for school's benefit.	4.13	0.74	High	3
9.	The principal offers strategic and confident goals for school improvement.	4.11	0.70	High	4
	Total	4.18	0.58	High	1
	Overall	3.94	0.47	High	2

According to Table 1, teachers rated their PIL in the high category, with mean scores ranging from 4.31 (highest) to 3.58 (lowest) and an overall mean of 3.94. This indicates that principals effectively comprehend, exercise, and execute their roles and responsibilities. The most frequently recognized leadership practice was item 3 (M = 4.31, S.D. = 0.95). This finding suggests that principals consistently demonstrate ethical behavior and fulfill their responsibilities with integrity. The second highest-rated item was item 2 (M = 4.29, S.D. = 0.61). This result highlights that teachers agree their principals possess the authority to make decisions concerning both teaching and administrative matters, which benefit the organization. Meanwhile, the item with the lowest mean score was item 8 (M = 3.58, S.D. = 0.86). Although this was the lowest-rated item, its mean score still falls in the high category, reflecting positive teacher perceptions of their PIL. This underscores the importance of verbal and written communication from school principals in enhancing teachers' performance and behavior.

Additionally, the researcher analyzed the mean scores of the three dimensions of CLT. Teachers rated BES the highest (M = 4.18, S.D. = 0.70), followed by POA (M = 3.91, S.D. = 0.50), and MOC the lowest (M = 3.78, S.D. = 0.54). These findings suggest that Cambodian school principals should complete leadership training programs or courses to be fully equipped for their instructional leadership roles. Furthermore, school principals must exhibit ethical behavior and maintain strong confidence in their leadership roles.

The TEP of their PIL influencing their self-efficacy is shown in the table below. The SCT is employed to measure TSE, and it is categorized into two subgroups, VIE and SOP.

Table 2. PIL and TSE

	PIL on TSE	M	S.D.	Meaning	Rank
	VIE				
1.	The principal has strong confidence to perform his or her tasks. These activities are the models that drive teachers to perform their tasks in confidence.	4.37	0.70	High	1
3.	The principal always shares his or her good experiences related to classroom management. These experiences build the confidence of teachers to well manage classrooms.	4.27	0.83	High	3
5.	The principal always has the ability and virtue to effectively solve the problems of the school. This point drives teachers to improve their ability and confidence in performing their tasks well.	4.21	0.81	High	5
7.	The principal always shows ethical behavior (such as dignity and morality) to perform his or her tasks. His or her ethical behavior drives teachers to improve their confidence in performing their tasks well.	4.08	0.76	High	10
9.	The principal always well explains each unit that he or she has studied to teachers. His or her explanation drives the confidence of teachers to explain each lesson to students.	4.31	0.74	High	2
	Total	4.24	0.61	High	1
	SOP				
2.	The principal always recommends teachers join social activities related to education to get new knowledge to perform their tasks in confidence.	4.26	0.80	High	4
4.	The principal always recommends teachers observe (read, watch, or listen to) news related to education to get new knowledge to perform their tasks in beliefs.	4.19	0.78	High	7
6.	The principal always recommends teachers read books related to building confidence improvement/confidence building to perform their tasks well.	4.16	0.76	High	9
8.	The principal always joins humanitarian activities to improve his or her leadership. His or her activities encourage teachers to join in obtaining experiences to perform their tasks in confidence.	4.20	0.77	High	6
10	The principal always recommends teachers join educational forums or discuss teaching approaches and confident improvement to perform their tasks well.	4.17	0.78	High	8
	Total	4.19	0.62	High	2
	Overall	4.22	0.57	High	1

Based on Table 2, the overall mean of 4.22, and the means of the individual items vary from a high of 4.08 to a low of 4.37, indicating that teachers have high self-efficacy levels. The most frequently reported perceived efficacy on leadership practice was item 1 (M = 4.37, S.D. = 0.70). The principals' strong confidence is the model that reinforces teachers to effectively perform their tasks. Then, it comes to item 9 (M = 4.31, S.D. = 0.74). This descriptive result shows that school principals frequently encourage teachers to participate in any educational seminar or other professional training to improve teaching methods and boost self-confidence. The perceived efficacy with the lowest mean was item 10 (M = 4.08, S.D. = 0.76). This lowest mean score is still in the high level which shows that the principals' ethical behavior, dignity and morality are significant aspects in fostering TSE. This ethical behavior drives teachers to improve their confidence in performing their tasks well.

Furthermore, the researcher specifically identified the mean scores of the two dimensions of SCT, showing that the TEP of PIL had the greatest influence on TSE through VIE (M = 4.24, S.D. = 0.561), followed by SOP (M = 4.19, S.D. = 0.62). These findings suggest that effective instructional leadership should enhance TSE by promoting reflective practices, supporting their professional growth, and engaging with them through collaborative discussions and conferences.

3.3 To what extent do TEP of their PIL on TSE differ, based on their demographic characteristics?

To achieve the research objectives, the researcher utilized One-way ANOVA and Independent Samples t-tests. The Independent Samples t-test was specifically used to analyze differences based on gender. Meanwhile, One-way ANOVA was conducted to examine variations based on age, educational levels, and years of teaching experience.

Table 3. Differences in Reported TEP of Gender in the Subcategory of CLT

IV dimension	Gender	M	S.D.	t	df	p-value
POA	Male	3.87	0.53	-1.76	293	0.002
	Female	3.98	0.42			
MOC	Male	3.76	0.57	-1.18	293	0.096
	Female	3.84	0.45			
BES	Male	4.15	0.60	-1.25	293	0.270
	Female	4.24	0.54			
CLT overall	Male	3.91	0.50	-1.57	293	0.003
	Female	4.00	0.98			

Based on Table 3, the TEP of PIL exhibits a statistically significant difference at the 0.05 level ($p < 0.01$). Analyzing the subcategories, POA demonstrated a statistically significant difference at the 0.01 level, while MOC and BES did not show significant differences ($p > 0.05$). Therefore, gender differences, whether male or female, have varying impacts on POA and the overall CLT, except MOC and BES.

Table 4: Differences in Reported TEP of Gender in the Subcategory of SCT

DV dimension	Gender	M	S.D.	t	df	p-value
VIE	Male	4.21	0.63	-1.76	293	0.34
	Female	4.31	0.59			
SOP	Male	4.18	0.64	-1.18	293	0.66
	Female	4.21	0.45			
CLT overall	Male	4.20	0.58	-1.57	293	0.95
	Female	4.27	0.57			

Classified by gender in terms of SCT, Table 4 indicates that the TEP of their PIL influencing TSE both as a whole and by aspects were not significant ($p > 0.05$). Therefore, respondents' perception, in terms of gender, does not have any influence on SCT and its subcategories.

The below tables contain one-way ANOVA analysis of the demographic data based on age, current study levels, and years of teaching experience.

Table 5. Differences in Reported TEP of Age in the Subcategory of CLT

IV dimension	F	Df (between, within)	p-value
POA	0.69	(2, 292)	0.50
MOC	4.39	(2, 292)	0.01*
BES	4.61	(2, 292)	0.01*
CLT overall	3.82	(2, 292)	0.02*

Table 5 revealed that the TEP of PIL, categorized by age, showed significant differences overall and across most dimensions, except for POA, where the p-value exceeded 0.05. This suggests that age does not have

a significant impact on TEP of POA. Yet, respondents' views of their school principals' MOC and BES differed significantly by age, indicating that these perceptions are influenced by the respondents' age.

Table 6. Differences in Reported TEP of Age in the Subcategory of SCT

DV dimension	F	Df (between, within)	p-value
VIE	4.22	(2, 292)	0.01*
SOP	1.53	(2, 292)	0.22
SCT overall	3.08	(2, 292)	0.04*

Table 6 indicates that the TEP of their PIL significantly impacted TSE based on age. The VIE was also significantly associated with respondents' age ($p < 0.05$), while SOP was not significant. This suggests that TEP of TSE, VIE, is influenced by age, indicating that different age groups have varying perceptions of their PIL. In contrast, age does not appear to impact SOP.

Table 7. Differences in Reported TEP of Levels of Current Study of CLT's Subcategory

IV dimension	F	Df (between, within)	p-value
POA	2.26	(2, 292)	0.11
MOC	1.63	(2, 292)	0.20
BES	0.60	(2, 292)	0.55
CLT overall	1.73	(2, 292)	0.18

Based on Table 7, respondents' current study levels were not significantly associated with the TEP of PIL across its three dimensions, as indicated by p-values greater than 0.05. This suggests that participants' study levels do not affect TEP toward the PIL of the school's principals.

Table 8. Differences in Reported TEP Levels of Current Study of SCT's Subcategory

DV dimension	F	Df (between, within)	p-value
VIE	4.22	(2, 292)	0.21
SOP	1.53	(2, 292)	0.02*
SCT overall	3.08	(2, 292)	0.08

Table 8 expressed that the current study levels of respondents do not affect TEP of TSE ($p > 0.05$). However, the respondents' levels of study did significantly affect a dimension of SCT, which is called SOP. Hence, teachers pursuing associate degrees, bachelor's degrees, or postgraduate degrees had different perceptions of TSE, and these perceptions affected SOP.

Table 9. Differences in Reported TEP Teaching Experience of CLT's Subcategory

IV dimension	F	Df (between, within)	p-value
POA	0.11	(2, 292)	0.90
MOC	0.17	(2, 292)	0.88
BES	0.05	(2, 292)	0.95
CLT overall	0.13	(2, 292)	0.88

Table 9 shows no significant differences ($p > 0.05$) about TEP of their PIL across any CLT subcategories, whether overall or by specific aspect, based on their teaching experience. This suggests that respondents' teaching experience does not affect their TEP toward PIL.

Table 10. Differences in Reported TEP of Teaching Experience of TSE's Subcategory

DV dimension	F	Df (between, within)	p-value
VIE	0.21	(2, 292)	0.81
SOP	1.11	(2, 292)	0.33
SCT overall	0.66	(2, 292)	0.52

Table 10 revealed TEP of their PIL influencing their efficacy based upon years of teaching experience in subcategories of the SCT, both as a whole and by aspects, were not different ($p > 0.05$). The result inferred that the teaching experience per respondent would not impact their perceptions toward their PIL effect on TSE.

The current study's result is aligned with previous research' s findings showing that school principals are essential factors in fostering TSE ($M = 4.18$) in the education context [3], [19], [20], [44], [46], [47], [52]. Based on the perception of teachers toward their PIL, it is shown that BES of school principals play a crucial role in positively influencing TSE among the three dimensions of the CLT. This finding has filled the gap in previous

studies to discover the effects of PIL on TSE with a larger sample size in Cambodian context. Importantly, the study uncovered the influence of each dimension of CLT on TSE, which was not mentioned in previous studies. For example, [3] explored the relationship of each dimension of CLT on TSE; however, the study did not highlight in detail the relationship between the three dimensions of CLT and TSE in terms of different demographic information of respondents. Another example is taken from research by [19] which already highlighted the dimension of instructional leadership effect on TSE. However, the study did not discover different perceptions of teachers based on their demographic data such as gender, age, experience, or level of education. In addition, this study also added valuable insights that were not mentioned in [20] study since their study did not highlight TEP based on different demographic information. Hence, the current findings exposed that the teachers are affected by the behavior of their PIL, which shapes their organizational commitment—defined as loyalty and dedication to the organization's success. This highlights the importance of leaders' ability to inspire, guide, and instill confidence in their team, fostering a motivated and productive work environment. Effective leadership behavior not only improves individual performance but also contributes to the overall success and sustainability of educational institutions. Furthermore, [47] described that effective PIL involves the ability of followers to foster collaboration and trust through empowerment while motivating team members to pursue the organization's goals and aspirations. Therefore, school principals should be capable of fulfilling their leadership roles, communicating actively, and behaving ethically toward teachers and academic staff.

The findings of TEP regarding PIL and TSE varied based on the demographic characteristics of respondents, specifically gender, as classified under CLT. In terms of gender, there was a significant difference in TEP toward PIL, as indicated by a p-value lower than 0.05. However, the results revealed no significant effect of gender on the relationship between PIL and TSE ($p = 0.95$). Additionally, demographic data related to age showed a significant influence on PIL ($p = 0.02$) and TSE ($p = 0.047$), though age was not a significant factor in SCT. Regarding the levels of the current study, TEP toward PIL ($p = 0.179$) and TSE ($p = 0.081$) did not exhibit any significant effects. Lastly, TEP based on teaching experience showed no substantial influence on PIL ($p = 0.47$), TEM ($p = 0.64$), or TSE ($p = 0.95$). Therefore, the respondents' years of teaching experience did not significantly impact PIL or TSE.

These results provide valuable insights for the principals, teachers, and relevant stakeholders since there were no prior studies that mentioned the differences of TEP in terms of their demographic characteristics before. Therefore, principals need to implement instructional leadership by applying CLT in their leadership roles. The principals can foster TSE well by focusing on teachers' demographic characteristics. For instance, in terms of gender, the principals should provide different leadership, behavior, and verbal or written communication differently. In Cambodian context, female teachers might not express their thoughts openly due to the historical societal norm. Hence, the principals must be aware of this matter, and treat female teachers with a respective behavior.

To sum up, this finding suggests that, in the current era of accountability, the primary role of Cambodian school principals is to focus on instructional leadership with the application of CLT. Modern school principals are tasked with a broad spectrum of responsibilities, including overseeing curriculum planning and evaluation, managing finances, ensuring compliance with legal requirements, implementing reforms, and, most importantly, leading instructional practices—all of which play a critical role in shaping TSE and in turn will influence students' academic achievements.

4. CONCLUSION

This study emphasizes the crucial responsibility of instructional leadership characteristics in impelling TSE in the education context. The findings are consistent with previous studies, which emphasize that the behavior and self-confidence of school principals significantly impact TSE positively. While demographic characteristics such as gender and age showed varying levels of significance in their influence on PIL and TSE, factors like teaching experience and levels of study demonstrated minimal impact. These results reaffirm the importance of effective leadership in shaping teacher engagement and performance, emphasizing the need for school principals to exhibit strong communication skills, motivational behavior, and the ability to align organizational vision with actionable strategies. By fostering these leadership qualities, educational institutions can create an environment conducive to high motivation, positive performance, and long-term success.

ACKNOWLEDGEMENTS

The author sincerely thanks the blind reviewers and editors of JBER for their thorough review and constructive feedback on this manuscript. Appreciation is also extended to the rector of a private university in Cambodia for granting permission to carry out this study at the institution. The author is deeply grateful to all respondents for their invaluable contributions, which were crucial to the success of this research. Also, special acknowledgment goes to colleagues, mentors, and friends for their steadfast support and encouragement

throughout the research journey. The author wishes everyone success, happiness, prosperity, and good fortune, with the hope that this study's outcomes will make a meaningful impact on the fields of education and leadership advancement.

REFERENCES

[1] E. T. Butts, "A Study of the Relationship of Teachers' Self-Efficacy and the Impact of Common Core Professional Development.," Doctoral Dissertation, Gardner-Webb University, 2016.

[2] A. Jillson, "How does Burnout and Self-Efficacy Effect Teacher's Perspectives and Implementation Status of Evidence Based Behavior Management Practices?.," Doctoral Dissertation, University of Massachusetts, 2020.

[3] S. Tep, "The correlation between instructional leadership and efficacy among the Cambodian public lower secondary school teachers" *J. -Salam*, vol. 6, no. 2, pp. 163–180, 2022, doi: 10.37249/assalam.v6i2.437.

[4] D. Christian and Y. Sayed, "Teacher motivation to teach in challenging school contexts on the cape flats, western cape, south africa.," *Educ. Sci.*, vol. 13, no. 2, p. 165, 20223, doi: 10.3390/educsci13020165.

[5] C. Day, P. Sammons, and K. Gorgen, "Successful School Leadership." Education development trust., 2020.

[6] E. O. Adu and S. O. Olatundun, "Teachers' perception of teaching as correlates of students' academic performance in oyo state, nigeria.," *Essays Educ.*, vol. 20, no. 1, p. 6, 2007, doi: vol20/iss1/6/.

[7] M. Akram, "Relationship between students' perceptions of teacher effectiveness and student achievement at secondary school level.," *Bull. Educ. Res.*, vol. 41, no. 2, pp. 93–108, 2019.

[8] D. S. Yost, "Reflection and self-efficacy: Enhancing the retention of qualified teachers from a teacher education perspective.," *Teach. Educ. Q.*, vol. 33, no. 4, pp. 59–76, 2006

[9] H. Kahveci, "The positive and negative effects of teacher attitudes and behaviors on student progress.," *J. Pedagog. Res.*, vol. 7, no. 1, pp. 290–306, doi: 10.33902/JPR.202319128.

[10] P. Hallinger and M. Lee, "Mapping instructional leadership in thailand: has education reform impacted principal practice?.," *Educ. Manag. Adm. Leadersh.*, vol. 42, no. 1, pp. 6–29, 2014, doi: 10.1177/1741143213502196.

[11] S. Liu and P. Hallinger, "Principal instructional leadership, teacher self-efficacy, and teacher professional learning in china: testing a mediated-effects model.," *Educ. Adm. Q.*, vol. 54, no. 4, Art. no. 4, 2018, doi: 10.1177/0013161X18769048.

[12] N. Nirmawati, S. N. Pratiwi, and I. Irvan, "The Effect of principal leadership on teacher performance through work motivation as an intervening variable at private vocational schools in medan tuntungan district.," *Indones. J. Educ. Math. Sci.*, vol. 4, no. 2, pp. 73–80, 2023, doi: 10.30596/ ijems.v4i2.14393.

[13] R. Cansoy, H. Parlar, and M. Polatcan, "Collective teacher efficacy as a mediator in the relationship between instructional leadership and teacher commitment.," *Int. J. Leadersh. Educ.*, vol. 25, no. 6, pp. 900–918, 2022, doi: 10.1080/13603124.2019.1708470.

[14] K. M. Williams, "Dynamics of Efficacy for Teachers in Formal Leadership Roles: A Case Study.," East Tennessee State University, 2015.

[15] M. B. Beyer and C. Ruhl-Smith, "The principal's role in school restructuring and reform: An examination of self-perceived leadership styles.," *J. Leadersh. Stud.*, vol. 5, no. 2, pp. 116–128, 1998, doi: 10.1177/107179199900500210.

[16] N. P. Ololube, "Teachers job satisfaction and motivation for school effectiveness: An assessment.," *Essays Educ.*, vol. 18, no. 1, p. 9, 2006, doi: 10.6007/IJARPED/v12-i4/20089.

[17] K. S. Finnigan, "Principal leadership and teacher motivation under high-stakes accountability policies.," *Leadersh. Policy Sch.*, vol. 9, no. 2, pp. 161–189, 2010.

[18] B. Han, R. Tösten, and Z. Elçiçek, "Public leadership behaviors of school principals: does it affect teacher motivation and job satisfaction in turkish culture?.," *Int. J. Public Leadersh.*, vol. 18, no. 3, Art. no. 3, 2022.

[19] R. Hosseingholizadeh, A. Amrahi, and H. El-Farr, "Instructional leadership, and teacher's collective efficacy, commitment, and professional learning in primary schools: A mediation model.," *Prof. Dev. Educ.*, vol. 49, no. 3, pp. 518–535, 2023, doi: 10.1080/19415257.2020.1850510.

[20] X. Ma and R. Marion, "Exploring how instructional leadership affects teacher efficacy: A multilevel analysis.," *Educ. Manag. Adm. Leadersh.*, vol. 49, no. 1, 2021, doi: 10.1177/1741143219888742.

[21] F. Ishaq, M. Hamzeh, and A. A. Tabieh, "The degree of charismatic leadership practice among school principals from teachers perspective.," *Educ. Adm. Theory Pract.*, vol. 29, no. 1, pp. 58–75, 2023, doi: 10.17762/kuey.v29i1.454.

[22] G. A. Sparks, "Charismatic leadership: Findings of an exploratory investigation of the techniques of influence.," *J. Behav. Stud. Bus.*, 2014

[23] R. J. House, "A 1976 Theory of Charismatic Leadership.," *Work. Pap. Ser. 76-06*, 1976

[24] L. S. Rubio, "Charismatic leadership of school heads, supervisory relationship and reciprocity beliefs: path model on work ethics of public elementary school teachers.," *Eur. J. Educ. Stud.*, vol. 10, no. 1, pp. 256–342, 2023, doi: oapub.org/edu/index.php/ejes/article/view/4654.

[25] B. Shamir and J. M. Howell, "Organizational and contextual influences on the emergence and effectiveness of charismatic leadership.," *Emerald Publ. Ltd.*, vol. 9, pp. 255–281, 2018, doi: 10.1108/S1479-357120180000009020.

[26] J. Zhang, H. Yim, and T. Wang, "Exploring the effects of professional learning communities on teacher's self-efficacy and job satisfaction in shanghai, china.," *Educ. Stud.*, pp. 1–18, 2020, doi: 10.1080/03055698.2020.1834357.

[27] Y. Liu, M. Ş. Bellibaş, and S. Gümüş, "The effect of instructional leadership and distributed leadership on teacher self-efficacy and job satisfaction: Mediating roles of supportive school culture and teacher collaboration.," *Educ. Manag. Adm. Leadersh.*, vol. 49, no. 3, pp. 430–453, 2021, doi: 10.1177/1741143220910438.

[28] P. Loukeri, A. Stathopoulou, Y. Salapata, and A. Drigas, "Charismatic leadership and special education teachers' empowerment.," *Int. J. Recent Contrib. Eng. Sci. IT*, vol. 9, no. 3, pp. 89–95, 2021, doi: 10.3991/ijes.v9i3.23477.

[29] A. Bandura, "Self-efficacy: toward a unifying theory of behavioral change.," *Psychol. Rev.*, vol. 84, no. 2, p. 191.

[30] F. Golestan, "A comparative study of sa'adi shirazi's view of education and albert bandura's social learning theory.," Thesis, Charles University, 2022.
[31] C. Mensah, E. M. Azila-Gbettor, C. R. Nunyonameh, M. E. Appietu, and S. N. Amedome, "Research methods anxiety, attitude, self-efficacy and academic effort: a social cognitive theory perspective.," *Cogent Psychol.*, vol. 10, no. 1, doi: 10.1080/23311908.2023.2167503.
[32] A. L. Hijriyah, A. H. Putri, A. Setiyawan, and A. H. Badrisya, "The social cognitive theory by albert bandura and its implementation in arabic language learning.," *Mantiqu Tayr J. Arab. Lang.*, vol. 4, no. 2, pp. 626–639, doi: 10.25217/mantiqutayr.v4i2.4564.
[33] A. Bandura, *Self-efficacy: The exercise of control*. New York: WH Freeman and Company, 1997.
[34] M. L. Pearce, "The effects of instructional leadership on teacher efficacy.," Doctoral Dissertation, Kennesaw State University, 2017.
[35] M. Tschannen-Moran and P. McMaster, "Sources of self-efficacy: Four professional development formats and their relationship to self-efficacy and implementation of a new teaching strategy.," *Elem. Sch. J.*, vol. 110, no. 2, pp. 228–245, 2009, doi: 10.1086/605771
[36] T. Urdan and F. Pajares, *Self-efficacy beliefs of adolescents*. 2006.
[37] J. Mulholland and J. Wallace, "Teacher induction and elementary science teaching: Enhancing self-efficacy.," *Teach. Teach. Educ.*, vol. 17, no. 2, 2001, doi: 10.1016/S0742-051X(00)00054-8.
[38] S. Shaukat and H. M. Iqbal, "Teacher self-efficacy as a function of student engagement, instructional strategies and classroom management.," *Pak. J. Soc. Clin. Psychol.*, vol. 9, no. 3, pp. 82–85, 2012.
[39] M. Poulou, "Personal teaching efficacy and its sources: Student teachers' perceptions.," *Educ. Psychol.*, vol. 27, no. 2, pp. 191–218, 2007, doi: 10.1080/01443410601066693.
[40] M. Tschannen-Moran and A. W. Hoy, "The differential antecedents of self-efficacy beliefs of novice and experienced teachers.," *Teach. Teach. Educ.*, vol. 23, no. 6, pp. 944–956, 2007, doi: 10.1016/j.tate.2006.05.003.
[41] A. Meyer, D. Richter, and V. Hartung-Beck, "The relationship between principal leadership and teacher collaboration: Investigating the mediating effect of teachers' collective efficacy.," *Educ. Manag. Adm. Leadersh.*, vol. 50, no. 4, pp. 593–612, 2022.
[42] Y. M. N. Almutairi, "Leadership self-efficacy and organizational commitment of faculty members: higher education.," *Adm. Sci.*, vol. 10, no. 3, p. 66, 2020, doi: 10.3390/admsci10030066.
[43] K. Khozin, T. Tobroni, and D. S. Rozza, "Implementation of albert bandura's social learning theory in student character development.," *Int. J. Adv. Multidiscip.*, vol. 3, no. 1, pp. 102–112, 2024, doi: 10.38035/ijam.v3i1.543.
[44] Y. E. H. Al-Mahdy, M. M. Emam, and P. Hallinger, "Assessing the contribution of principal instructional leadership and collective teacher efficacy to teacher commitment in Oman.," *Teach. Teach. Educ.*, vol. 69, 2018, doi: 10.1016/j.tate.2017.10.007.
[45] P. Hallinger, "Tools for improving principals' work," in *A data-driven approach to assess and develop instructional leadership with the PIMRS.*, 2012, pp. 47–69.
[46] R. D. Goddard, W. K. Hoy, and A. W. Hoy, "Collective teacher efficacy: Its meaning, measure, and impact on student achievement.," *Am. Educ. Res. J.*, vol. 37, no. 2, pp. 479–507, 2000, doi: 10.3102/00028312037002479.
[47] K. Leithwood and D. Jantzi, "Linking leadership to student learning: The contributions of leader efficacy.," *Educ. Adm. Q.*, vol. 44, no. 4, pp. 496–528, 2008, doi: 10.1177/0013161X08321501.
[48] J. W. Creswell and J. D. Creswell, *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications, 2017.
[49] R. V. Krejcie and D. W. Morgan, "Determining sample size for research activities.," *Educ. Psychol. Meas.*, vol. 30, 1970.
[50] P. Hallinger and W. C. Wang, "Measurement properties of the principal instructional management rating scale.," in *Sarasota, FL: Leading Development Associates*, 2013.
[51] I. Kennedy, "Sample size determination in test-retest and Cronbach alpha reliability estimates.," *Br. J. Contemp. Educ.*, vol. 2, no. 1, 2022, doi: 10.52589/BJCE-FY266HK9.
[52] P. Hallinger, "Developing Successful Leadership," in *Developing Instructional Leadership.*, Springer, Dordrecht, 2010, pp. 61–76.

Research Questionnaire

Entitled

How Principals' Instructional Leadership Influence Teachers' Self-Efficacy

Dear Respected Teachers,

I am TEP Sopheng, from Cambodia. I am researching the subject of "How Principals' Instructional Leadership Influence Teachers' Self-Efficacy" The purposes of this study are focused on (a) evaluating the extent to which PIL influence TSE in Cambodia, and (b) analyzing differences in TEP toward their PIL based on demographic characteristics. This questionnaire measures the ways that you think and believe in what the teachers' perceptions of school principals' instructional leadership influences TSE in Cambodia. Realizing that this is a busy time of the year, I truly appreciate your cooperation to complete the questionnaire.

Instruction:

1. This questionnaire series contains 3 parts:
   Part 1: Teachers' Demographic Characteristics
   Part 2: Teachers' Perceptional Levels on School Principals' Instructional Leadership
   Part 3: School Principals' Instructional Leadership on Teachers' Self-Efficacy

2. As you are a teacher, please respond to the questionnaire with your true comments. Although it is completely voluntary, I hope you will share your thoughts so I may obtain high-quality information to identify the issues and goals. I want to reassure you that your answers will be kept private and anonymous. The information is solely of interest to me in its aggregate form. It will only be accessible to the study's researcher.

I would like to express my gratitude for your cooperation and participation in my research project.

SOPHENG TEP
Researcher

Part 1: Teachers' Demographic Characteristics

Guidelines: This instrument is intended to offer you a chance to address your Demographic Characteristics. Kindly make sure your name IS NOT ENTERED on the above document. Your answers will be stored privately. Please select the option that best designates you by putting a tick (✓) into the box ❑ or entering your information in the blank.

1. Gender: ❑ Male ❑ Female

2. Age: ❑ Below 30 years ❑ 41-50 years
❑ 30-40 years ❑ More than 50 years

3. Current Study's Levels:
❑ Below Bachelor's Degree
❑ Bachelor's Degree
❑ Higher Bachelor's Degree

4. Working Experience:
❑ Below 10 years
❑ 10-20 years
❑ More than 20 years

Part 2: Teachers' Perception Levels on School Principals' Instructional Leadership

The purpose of this part is focused on the Teachers' Perceptional Levels on School Principals' Instructional Leadership. There are ten statements in the questionnaire below. Please read each one and circle the response (**1, 2, 3, 4, or 5**) that you essentially think job satisfaction relates to your performance. Please fill out all sections of the questionnaire, making only **ONE** response unless asked to do otherwise. The criteria for the responses include:

'**1**' refers to 'He/she **never** does this'.
'**2**' refers to 'He/she **rarely** does this.
'**3**' refers to 'He/she **sometimes** does this'. (About 50% of the time)
'**4**' refers to 'He/she **frequently** does this'.
'**5**' refers to 'He/she **always** does this'.

No	Teachers' Perception Levels on School Principals' Instructional Leadership	Level of Practices 1	2	3	4	5
1.	The principal has the authority to make decision on both teaching and non-teaching tasks.					
2.	The principal motivates teachers to use teaching materials freely, and adopt both teacher-centered and student-centered methods.					
3.	The principal consistently exhibits ethical behavior, including dignity, morality, and virtue, in their duties.					
4.	The principal enforces rules by punishing staff who disobey school regulations and fining vendors selling prohibited food.					
5.	The principal values and motivates teachers to perform their tasks effectively.					
6.	The principal confidently undertakes risky activities for school's benefit.					
7.	The principal demonstrates the ability to perform tasks effectively.					
8.	The principal provides verbal and written feedback on teachers' tasks and behavior.					
9.	The principal offers strategic and confident goals for school improvement.					
10.	The principal meets individually with teachers to discuss student progress and curriculum execution.					

Part 3: School Principals' Instructional Leadership on Teachers' Self-Efficacy

The purpose of this part is focused on the School Principals' Instructional Leadership on Teachers' Efficacy. There are ten statements in the questionnaire below. Please read each one and circle the response (**1, 2, 3, 4, or 5**) that you essentially think and trust how your principal his or her leadership in your institution relates to your performance. Please fill out all sections of the questionnaire, making only **ONE** response unless asked to do otherwise. The criteria for the responses include:

'**1**' refers to 'He/she **never** does this'.

'**2**' refers to 'He/she **rarely** does this.
'**3**' refers to 'He/she **sometimes** does this'. (About 50% of the time)
'**4**' refers to 'He/she **frequently** does this'.
'**5**' refers to 'He/she **always** does this'.

No	School Principals' Instructional Leadership on Teachers' Self-Efficacy	Level of Perceptions 1 2 3 4 5
1.	The principal has strong confidence to perform his or her tasks. These activities are the models drive teachers to perform their tasks in confidence.	
2.	The principal always recommends teachers to join social activities related to education for getting new knowledges to perform their tasks in confidence.	
3.	The principal always shares his or her good experiences related to classroom management. These experiences build the confidence of teachers to well manage classrooms.	
4.	The principal always recommends teachers to observe (read, watch or listen) news related to education for getting new knowledges to perform their tasks in beliefs.	
5.	The principal always has the ability and virtue to effectively solve problems of the school. This point drives teachers to improve their ability and confidence in performing their tasks well.	
6.	The principal always recommends teachers to read books related to build confident improvement / to confidence building to perform their tasks well.	
7.	The principal always shows ethical behavior (such dignity and morality) to perform his or her tasks. His or her ethical behavior drives teachers to improve their confidence in performing their tasks well.	
8.	The principal always joins humanitarian activities for improving his or her leadership. His or her activities encourage teachers to join for obtaining experiences to perform their tasks in confidence.	
9.	The principal always well explains each unit which he or she has studied to teachers. His or her well explanation drives the confidence of teachers to explain each lesson to their students.	
10.	The principal always recommends teachers to join educational forums or discuss on teaching approaches and confident improvement to perform their tasks well.	

This is the end of the questionnaire!
Greatly thanks!

Results from SPSS

Descriptive statistics of the demographic data

Gender

0=Male, 1=Female

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	198	67.1	67.1	67.1
	Female	97	32.9	32.9	100.0
	Total	295	100.0	100.0	

Age

1=Below 30, 2=Between 30-45, 3=Over 45

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 30	63	21.4	21.4	21.4
	Between 30-45	157	53.2	53.2	74.6
	Over 45	75	25.4	25.4	100.0
	Total	295	100.0	100.0	

Levels of study

1=Below BA, 2=BA, 3=Higher than BA

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below Bachelor Degree	92	31.2	31.2	31.2
	Bachelor Degree	145	49.2	49.2	80.3
	Higher than Bachelor Degree	58	19.7	19.7	100.0
	Total	295	100.0	100.0	

Years of teaching experience

Years of Teaching Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 10 years	82	27.8	27.8	27.8
	From 10-20 years	115	39.0	39.0	66.8
	More than 20 years	98	33.2	33.2	100.0
	Total	295	100.0	100.0	

Gender and the Subcategory of ILP-CLT

Group Statistics

	0=Male, 1=Female	N	Mean	Std. Deviation	Std. Error Mean
CLT_POA	Male	198	3.8771	.53322	.03789
	Female	97	3.9862	.42746	.04340
CLT_MOC	Male	198	3.7614	.57788	.04107
	Female	97	3.8402	.45812	.04652
CLT_BES	Male	198	4.1565	.60420	.04294
	Female	97	4.2474	.54492	.05533
CLT	Male	198	3.9170	.50456	.03586
	Female	97	4.0082	.38841	.03944

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
CLT_POA	Equal variances assumed	9.754	.002	-1.757	293	.080	-.10911	.06210	-.23133	.01310
	Equal variances not assumed			-1.894	232.352	.059	-.10911	.05762	-.22263	.00440
CLT_MOC	Equal variances assumed	2.786	.096	-1.175	293	.241	-.07884	.06712	-.21094	.05325
	Equal variances not assumed			-1.271	234.546	.205	-.07884	.06205	-.20109	.04341
CLT_BES	Equal variances assumed	1.221	.270	-1.253	293	.211	-.09091	.07256	-.23370	.05189
	Equal variances not assumed			-1.298	209.439	.196	-.09091	.07004	-.22897	.04716
CLT	Equal variances assumed	9.053	.003	-1.567	293	.118	-.09123	.05821	-.20579	.02334
	Equal variances not assumed			-1.712	240.306	.088	-.09123	.05330	-.19623	.01377

Gender and the Subcategory of TSE-SCT

	0=Male, 1=Female	N	Mean	Std. Deviation	Std. Error Mean
SCT_VIE	Male	198	4.2141	.62649	.04452
	Female	97	4.3175	.58648	.05955
SCT_SOP	Male	198	4.1848	.61386	.04363
	Female	97	4.2144	.64112	.06510
SCT	Male	198	4.1995	.57543	.04089
	Female	97	4.2660	.57480	.05836

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
SCT_VIE	Equal variances assumed	.911	.341	-1.359	293	.175	-.10338	.07605	-.25307	.04630
	Equal variances not assumed			-1.390	202.495	.166	-.10338	.07435	-.24999	.04322
SCT_SOP	Equal variances assumed	.188	.665	-.383	293	.702	-.02958	.07720	-.18153	.12236
	Equal variances not assumed			-.378	183.553	.706	-.02958	.07836	-.18419	.12502
SCT	Equal variances assumed	.003	.958	-.933	293	.352	-.06648	.07129	-.20679	.07382
	Equal variances not assumed			-.933	190.974	.352	-.06648	.07126	-.20705	.07408

Age and the Subcategory of ILP-CLT

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
CLT_POA	Between Groups	.350	2	.175	.691	.502
	Within Groups	73.979	292	.253		
	Total	74.329	294			
CLT_MOC	Between Groups	2.520	2	1.260	4.389	.013
	Within Groups	83.820	292	.287		
	Total	86.340	294			
CLT_BES	Between Groups	3.088	2	1.544	4.607	.011
	Within Groups	97.872	292	.335		
	Total	100.961	294			
CLT	Between Groups	1.660	2	.830	3.815	.023
	Within Groups	63.518	292	.218		
	Total	65.178	294			

Age and the Subcategory of TSE-SCT

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
SCT_VIE	Between Groups	3.121	2	1.560	4.222	.016
	Within Groups	107.916	292	.370		
	Total	111.036	294			
SCT_SOP	Between Groups	1.182	2	.591	1.534	.217
	Within Groups	112.569	292	.386		
	Total	113.751	294			
SCT	Between Groups	2.010	2	1.005	3.082	.047
	Within Groups	95.225	292	.326		
	Total	97.235	294			

Levels of Study and the Subcategory of ILP-CLT

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
CLT_POA	Between Groups	1.132	2	.566	2.259	.106
	Within Groups	73.197	292	.251		
	Total	74.329	294			
CLT_MOC	Between Groups	.953	2	.476	1.629	.198
	Within Groups	85.387	292	.292		
	Total	86.340	294			
CLT_BES	Between Groups	.414	2	.207	.601	.549
	Within Groups	100.547	292	.344		
	Total	100.961	294			
CLT	Between Groups	.763	2	.381	1.729	.179
	Within Groups	64.415	292	.221		
	Total	65.178	294			

Levels of Study and the Subcategory of TSE-SCT

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
SCT_VIE	Between Groups	1.188	2	.594	1.579	.208
	Within Groups	109.848	292	.376		
	Total	111.036	294			
SCT_SOP	Between Groups	2.964	2	1.482	3.907	.021
	Within Groups	110.787	292	.379		
	Total	113.751	294			
SCT	Between Groups	1.658	2	.829	2.533	.081
	Within Groups	95.577	292	.327		
	Total	97.235	294			

Years of Teaching Experience and the Subcategory of ILP-CLT

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
CLT_POA	Between Groups	.057	2	.028	.111	.895
	Within Groups	74.272	292	.254		
	Total	74.329	294			
CLT_MOC	Between Groups	.098	2	.049	.166	.847
	Within Groups	86.242	292	.295		
	Total	86.340	294			
CLT_BES	Between Groups	.035	2	.017	.050	.951
	Within Groups	100.926	292	.346		
	Total	100.961	294			
CLT	Between Groups	.058	2	.029	.129	.879
	Within Groups	65.120	292	.223		
	Total	65.178	294			

Years of Teaching Experience and the Subcategory of TSE-SCT

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
SCT_VIE	Between Groups	.157	2	.078	.206	.814
	Within Groups	110.880	292	.380		
	Total	111.036	294			
SCT_SOP	Between Groups	.862	2	.431	1.114	.329
	Within Groups	112.890	292	.387		
	Total	113.751	294			
SCT	Between Groups	.435	2	.217	.656	.520
	Within Groups	96.800	292	.332		
	Total	97.235	294			