THE DEVELOPMENT OF A MODEL FOR ENHANCING LEADERSHIP CAPABILITIES OF NON-ACADEMIC STAFF IN A THAI PRIVATE HIGHER EDUCATION INSTITUTION

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Abstract: This exploratory sequential multiple methods design was carried out at a selected Thai private higher education institution. The research objectives of this study were 1) to determine the desired leadership capabilities of non-academic staff, 2) to determine the current leadership capabilities of non-academic staff, 3) to find the gap between the desired and current leadership capabilities of non-academic staff, 4) to assess the influence of demographic factors on the leadership capabilities of non-academic staff, and 5) to develop a model for enhancing leadership capabilities of non-academic staff. The following theories/frameworks formed this study's basis: Talent Leadership attributes, Theory of Servant Leadership, and 21st Century Skills. Self-evaluated questionnaires were distributed to 395 non-academic staff, and 25 supporting unit administrators were interviewed to identify the desired and current leadership capabilities. This study employed descriptive statistics (frequency, mean, SD), inferential statistics (t-test, one-way ANOVA, correlation analysis), and expected performance (gap analysis). The results indicated that non-academic staff practiced the overall desired leadership attributes at their workplace at a high level with an average mean score of 4.24 (SD=0.52) and the current leadership attributes with an average mean score of 3.96 (SD=0.44) according to a 5-point rating scale. There was a statistically significant difference between the desired and current leadership capabilities of non-academic staff on three primary leadership attributes at the 0.05 level (t=11.99, $p<0.05$). A highly significant correlation was found when utilizing Pearson's correlation coefficient to compare the desired status, the current status, and the capabilities gap of the main leadership attributes. Moreover, expected performance (gap analysis) determined a relatively high correlation of leadership capabilities of non-academic staff, with a mean score ranging

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from 4.17 to 4.31. The final model was developed by consolidating the findings from all the objectives and subsequent validation by 25 experts.

Keywords: Non-academic Staff; Leadership Capability; Thai Private Higher Education Institution

Introduction

Non-academic staff in higher education institutions play an essential role as professional employees who contribute to higher education success (Queen's University, 2011). They are non-academic staff who contribute significantly to overall success along with higher education institutions' academic affairs. Non-academic staff bring a vital compilation of professional skills to the institution, possess an abundance of institutional knowledge, provide crucial resources, and work alongside administrators and faculty in realizing the higher education institution's mission.

Non-academic staff work under various administrations at the department level. This long-term experience gives them invaluable expertise and lends consistency to higher education institutions' daily operations. Their input and opinions are vital to many decision-making processes. Also, non-academic staff's contribution through their performance positively impacts the student experience (Arrington, 2015).

Empowering employees has long been associated with organizational performance outcomes such as innovation, greater efficiency, and better performance. Non-academic staff in private higher education institutions are responsible for the institution's significant day-to-day operations. Thus, organizational strategies that enhance employee empowerment and encourage and initiate innovative behaviors may become necessary for the long-term survival of higher education institutions' competitiveness. However, non-academic staff in higher education institutions have received little academic study awareness (Lau, 2010).

Socioeconomic demands and increasing competitiveness have been a focus in the 21st century for higher education institutions. Meanwhile, efficient and effective strategies have already been considered by institutions that wish to enhance strategies for further developing their institution. The American educational system had long declared its confidence to be the best in the world (Fleet & Winthrop, 2010). This information was affirmed and extended farther afield by higher education administrators in the United States, Australia, India, and South Africa (Anyangwe, 2012). Unmistakably, several research projects and authors such as Education International (2010), Knight (2008), Marginson

(2006), UNESCO (2013), and Wang (2012) have demonstrated that global competition; political pressure, and economic expansion are the most important factors in developing higher educational institutions. These are the main transformative issues in the present day.

Moreover, educational leaders have recommended that organizations consider all dimensions to maintain quality (Elmore, 1990; Fullan, 1993; Nias, Southworth, & Campbell, 1992; Tam & Cheng, 1996; Wideen, 1992). Therefore, it is justly implicit that higher education was as crucial in the past as in the present. Furthermore, data have shown a decline in the number of students entering university. Due to rising competition, universities will investigate service quality, enhancing the academic year itself (Daniel, 2012). Leaders in higher learning domains are aware that educational institutions such as universities are the most significant resource, exceptionally high-quality staff in improving their service capacity in university education and other higher education institutions such as colleges.

Considering the abovementioned, the current researcher realizes that non-academic staff in higher educational institutions need to enhance their services to satisfy stakeholders, particularly their behavior, skills, and interpersonal communication. Additionally, Church, Bland, and Church (2010) demonstrated that policy design, delivery, and professional development evaluation are not the main factors in developing non-academic staff skills. Perhaps practice methodology may be considered an essential tool in meeting the various needs of non-academic staff.

Sparks and Hirsh (2000) posited that the programs for enhancing or developing non-academic staff have not been successful because they do not fit the requirements that include practice methodology to support effective professional staff. One of the various tools that this researcher focused on in this paper to examine the development of non-academic staff in higher education institutions is the "model" (Singh, Schrape, & Kelly, 2012). Generally, a model can be categorized into two types: a model for teaching and a model for learning. In addition, developing non-academic staff skills has been considered for the manual approach and the technology trends for accessing educational resources (Singh, Schrape, & Kelly, 2012). Thus, for developing non-academic staff, the critical issue should be considered in terms of new technology literacy, such as social media or online learning (Johnson, Smith, & Willis, 2011), and include 21st-century capabilities; as evidenced from the research studies underpinned workforce demand with industry, entrepreneurs, and startup employers (Workforce Blueprint and Career Blueprint, 2016).

Research Objectives

The following research objectives form the basis of this study:

1. To determine the desired leadership capabilities of non-academic staff in a Thai private higher education institution.
2. To determine the current leadership capabilities of non-academic staff in a Thai private higher education institution.
3. To find the gaps between the desired and current leadership capabilities of non-academic staff in a Thai private higher education institution.
4. To assess the influences of demographic factors on the leadership capabilities of non-academic staff in a Thai private higher education institution.
5. To develop a model for enhancing leadership capabilities of non-academic staff in a Thai private higher education institution.

Literature Review

This research's theoretical framework consists of the Talent Leadership attributes, Servant Leadership theory, and 21st Century Skills.

Talent Leadership Attributes

In the book "Talent Leadership: A Proven Method for Identifying and Developing High-Potential Employs," Mattone (2013) proposed the three magical elements are called Leading Indicators, including Capability: the workforce's competencies and physical skills to perform tasks, Commitment: the emotional passion, drive and motivation to executive, and Alignment: the sense of "stewardship" degree that a leader has to the strategic mission and vision of the organization. Through these Leading Indicators, leaders can able to measure, calibrate, and recalibrate their current workforce in preparing to be future leaders in which they become more capable, committed, and aligned. The Stealth Fighter model was presented as a competency model and was used to explain the predictive relationships between an organization's leadership, improvement practices, and successful operation. Leading capabilities, Commitment, and Alignment are the leading indicators regarding the Stealth Fighter model's sector required for performing a job or functioning more persistently and more effectively. Matone mentioned that leaders equipped with all three leading indicators (capabilities, Commitment, and Alignment) could predict successful operation results in the organization. Furthermore, Mattone also presented the outer-core leadership competencies, "the Leadership Wheel of Success," a universal target of leadership success that consists of nine strategic leadership competencies and skills that are the sub-leadership items assessment, including critical thinking, decision-making, think and act purposefully, emotional leadership/intelligence, communication skills, talent leaders, vision, change leadership, and driving for results.

Servant Leadership Theory

Servant Leadership theory was first conceptualized by Greenleaf (1970), which initially proposed the Servant Leadership principle within the framework of a leader's desire to serve. Although Servant leaders are motivated by the desire to serve their followers, ultimately, they aim to influence and empower their followers for the good of the organization and community. In effect, the conceptual framework of this theory also emphasizes the needs of the followers. Interestingly, the literature indicates that the needs of the organization are more crucial than the needs of followers who, in turn, should support the organization. Servant leaders take a role in both serving and leading their followers. Greenleaf (1977) generated ten attributes of a Servant leader as follows; 1) awareness, 2) healing, 3) listening, 4) persuasion, 5) empathy, 6) conceptualization, 7) stewardship, 8) foresight, 9) building community, and 10) commitment to the growth of people.

21st Century Skills

"21st Century" is described as a new millennium of the age of knowledge transformation and information technology revolution (Martin, 2006; Trilling & Fadel, 2009). Trilling and Fadel (2009) described 21st-century skills as advanced skills that furnish the workforce to gear up for the demands of work in a new era and are the most critical components of the institution's success, growth, and competitiveness. A practical framework of 21st-century skills-based on Partnership's framework guideline for 21st Century Skills (P21) (2009) prepares people to successfully meet the new era's challenges. The proposed 21st-century skills described are the essential lifeblood of a person that provides a substantive, compelling, and engaging argument for success in the future of work. In the book "21st Century Skills: Learning for Life in Our Time", the critical components of 21st-century skills, learning and innovation skills, digital literacy skills, and career and life skills were presented.

Synthesized Leadership Attributes According to the Experts' Opinion

In the current study, the researcher realized that non-academic staff could develop their leadership capabilities by adopting distinctive leadership attributes with a complex mix of work experience, knowledge, skills, and attitude. It is proposed that a selected Thai PHEI must implement creativity practices in a modern and efficient way for their non-academic staff who possess distinctive capabilities, enabling a selected Thai PHEI to benefit from the competitive advantage. More specifically, the researcher will develop an attribute framework to use as measurement indicators to enhance the leadership capabilities of non-academic staff in a selected Thai PHEI. *Talent Leadership Attributes*. For this study, the synthesized "Achiever," "Communication," "Futuristic," "Responsibility," and "Strategic Thinking"

attributes from 86 reviewed leadership attributes by obtaining the expert's opinion with a frequency of higher than five were chosen for use as measurement indicators of Talent Leadership attributes. *Servant Leadership Attributes*. A total of 65 servant leadership attributes were reviewed and analyzed. Consequently, five synthesized attributes rated higher than six by experts were used in the conceptual framework. They are "Empowerment", "Humility", "Stewardship", "Service", and "Vision". *21st Century Skills*. A total of 90 attributes of 21st Century Skills were reviewed, and those scored by the experts at eight, the highest frequency ranking, were selected. A total of five were selected and used as 21st Century Skills measurement indicators, including "Collaboration/Teamwork," "Communication Skills," "Critical Thinking," "Leadership," and "Problem Solving" attributes.

Conceptual Framework

The conceptual framework presents the key variables mentioned in the objectives of the study by following the Input, Process, and Output (IOP). For the Input, the researcher explores the desired and the current leadership capabilities of non-academic staff in a Thai private higher education institution based on the theories of Talent leadership, Servant leadership, and 21st-century skills for developing a model for enhancing leadership capabilities. For the process, after gathering the statistical data. The researcher determines the desired and current leadership capabilities of non-academic staff. For the Output, the researcher develops a model for enhancing the leadership capabilities of non-academic staff in a Thai private higher education institution by incorporating all results of objectives 1 to 5. The following figure shows the conceptual framework of this study.

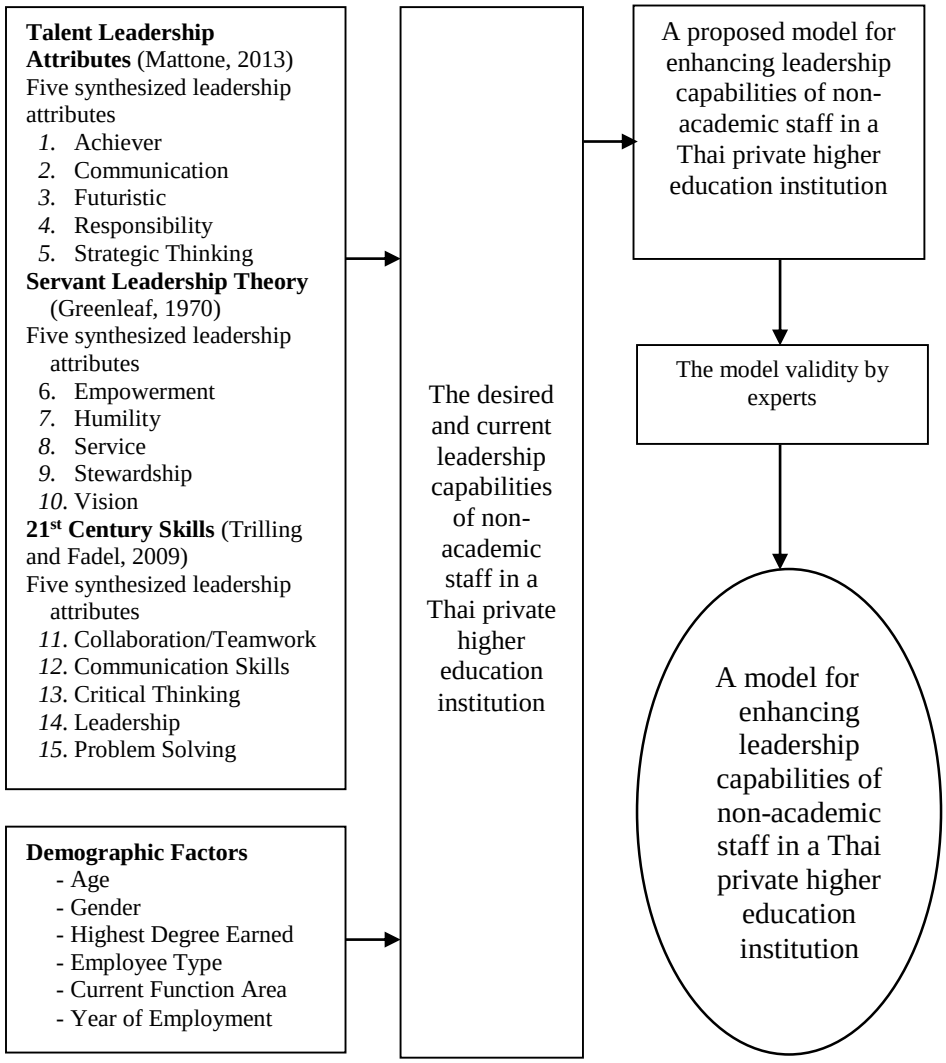

Figure 1. ***Conceptual Frameworks Used for this Study***

Research Methodology

The study aimed to determine the desired and current leadership capabilities of non-academic staff in a targeted Thai private higher education institution (PHEI). Based on attributes of Talent Leadership (Mattone, 2013), the theory of Servant Leadership (Greenleaf, 1970), and 21st Century Skills (Trilling, Fadel, 2009) as depicted in the conceptual framework of this study, this research undertaking consisted of five phases of work.

In Phase One, the researcher explored the conceptual framework of leadership capabilities of non-academic staff in a Thai PHEI. By conducting a literature

review and in-depth interviews. The researcher reviewed, analyzed, and synthesized relevant literature, including books, research, articles, journals, and online publications, and derived information from 14 qualified experts' opinions based on relevant theoretical attributes from Talent Leadership, Servant Leadership, and 21st Century Skills. After confirmation by experts, a questionnaire was developed. Subsequently, the questionnaire was also checked for its content validity and reliability by the same group of experts.

In Phase Two, the survey questionnaire was distributed to the target group of research participants to determine the desired and current leadership capabilities of non-academic staff according to research objectives one and two. Moreover, the in-depth interview questions were also constructed and asked the supporting unit administrators to explore their perceptions of the desired and current leadership capabilities expected and practiced, respectively, by their subordinates. Descriptive statistics, including frequencies, means, and standard deviation, were utilized for data analysis in this phrase.

In Phase Three, find the gap between the desired and current leadership capabilities of non-academic staff in a selected Thai PHEI using inferential statistics (t-test, one-way ANOVA, correlation analysis) and expected performance (gap analysis). The researcher evaluated the gap between the participants' desired and current leadership capabilities based on data collection and analysis from phrases one and two. The researcher assessed the meaning and significant gap between the non-academic staff's desired and current leadership capabilities, intending to identify the "Capabilities Gap" between the two categories of capabilities. The comparison leads to identifying a "Capability Gap" between the desired and current leadership capabilities.

In Phase Four, based on the data collection and analysis results conducted in Phase Two, including the respondents' demographic factors as the main part of the Research Objective Three's research instrument. The researcher studied the influence of selected demographic factors on the leadership capabilities of the target population. Inferential statistics, including *t*-test, one-way ANOVA, and correlation analysis, were used as data analysis methods for this phase.

For the Final Phase, a proposed model was developed based on the results derived from Research Objectives One to Four. The researcher generalized the outcome regarding the group's desired and current leadership capabilities, the significant gap, and the capabilities gap between the target respondents' two types of leadership capabilities. The value of a constructed model in this study

lay in its use as an intervention. Empirical validation was used to ensure adequate reliability by 25 experts who met the criteria. Subsequently, a model formulated for enhancing the leadership capabilities of non-academic staff in a selected Thai PHEI was developed from Research Objective Five. The proposed model provided guidelines for supporting unit administrators of the Thai PHEI to create and implement intervention schemes to ensure more outstanding leadership capabilities in their staff.

Population

In this study, the supporting unit's administrator, department head, staff, and employees regarded as non-academic staff working in a selected Thai PHEI were used as the target population consisting of 587 non-academic staff recruited from 19 supporting units in the academic year 2020 for data collection.

Research Findings

Research Objective One

To determine the desired leadership capabilities of non-academic staff in a Thai private higher education institution.

Conceptual Framework of Leadership Capabilities. According to the research objective one, reviewed literature and experts' opinions were the two data collection sources. The use of literature review and in-depth interviews to derive useful information from experts' opinions helped the researcher do the thematic analysis to determine the desired leadership capabilities of non-academic staff in a Thai PHEI declared as the research objective one.

In these processes, the researcher reviewed and analyzed relevant literature and derived useful information from experts' opinions. Finally, the highest frequency ranking order from the first to the fifth of each main leadership attribute was synthesized to utilize as a theoretical framework. Based on this study, 86 Talent Leadership attributes, according to the expert's opinion, were reviewed. Five synthesized attributes that received a frequency of more than five and obtained the highest frequency order ranked from the first to fifth were considered to use as measurement indicators of Talent Leadership attributes as follows, "Achiever," "Communication," "Futuristic," "Responsibility," and "Strategic Thinking" attributes. There were 5 out of 65 reviewed Servant Leadership attributes that obtained frequency higher than six were synthesized and used as the conceptual framework, as follows, "Empowerment," "Humility," "Stewardship," "Service," and "Vision" attributes. Lastly, 90 attributes of the 21st-century skills' were reviewed, and five attributes that indicated frequency greater than eight were selected to use

as 21st Century Skills for measurement indicators, including "Collaboration/Teamwork," "Communication Skills," "Critical Thinking," "Leadership," and "Problem Solving" attributes.

As a result, a survey questionnaire was developed that included synthesized fifteen sub-variables, and each variable contained a different number of items (Table 1).

Table 1. *The perception data were collected in fifteen variables by 2 to 7 statements*

No.	Leadership Attributes	Survey Questions	Total Number of Survey Questions
1.	Talent Leadership Attributes		
	1.1 Achiever	1-6	6
	1.2 Communication	7-11	5
	1.3 Futuristic	12-15	4
	1.4 Responsibility	16-17	2
	1.5 Strategic Thinking	18-22	5
	Total	1-22	22
2.	Servant Leadership Attributes		
	2.1 Empowerment	23-28	6
	2.2 Humility	29-33	5
	2.3 Service	34-38	5
	2.4 Stewardship	39-41	3
	2.5 Vision	42-46	5
	Total	23-46	24
3.	21st Century Skills		
	3.1 Empowerment	47-50	4
	3.2 Humility	51-55	5
	3.3 Service	56-62	7
	3.4 Stewardship	63-68	6
	3.5 Vision	69-72	4
	Total	47-72	26
	Grand Total	1-72	72

In this study, a fundamental principle of ethics awareness in research was conducted by obtaining approval for the exemption review by the selected Thai PHEI's Review Board before distributing the survey questionnaires. Furthermore, participants' rights are protected by putting in place measures and preventing violation of their rights by the researcher during the survey questionnaires.

The Desired Leadership Capabilities of Non-academic Staff of a Thai Private Higher Education Institution. To determine the desired leadership capabilities of non-academic staff, the researcher conducted a survey questionnaire to evaluate non-academic staff's perceptions of their desired leadership capability. The survey questionnaires were distributed to the population of 587 non-academic staff; 395 persons returned questionnaires; these were used in the study.

Data was collected through 72 items in which the survey describes their leadership capability by using a 5-point scale that ranges from 1 (Strongly Disagree) to 5 (Strongly Agree).

In this section, the results are illustrated through the variable categories of leadership capability attributes. For each attribute, the participants' non-academic staff responded to their self-perception of the leadership capabilities performing by selecting the score of the desired status. The mean score, standard deviation (SD), and interpretation of the desired status were presented.

Table 2. *Summary of survey results of the desired leadership attributes in this study (n=395)*

Desired Leadership Attributes *Variable*	Mean	SD	Interpretation
1. Talent Leadership Attributes			
1.1 Achiever	4.18	0.56	High
1.2 Communication	4.26	0.61	High
1.3 Futuristic	4.23	0.57	High
1.4 Responsibility	4.33	0.62	High
1.5 Strategic Thinking	4.11	0.58	High
Average	4.23	0.51	High
2. Servant Leadership Attributes			
2.1 Empowerment	4.38	0.58	High
2.2 Humility	4.33	0.56	High
2.3 Service	4.39	0.56	High
2.4 Stewardship	4.38	0.60	High
2.5 Vision	4.09	0.65	High
Average	4.32	0.47	High
3. 21st Century Skills			
3.1 Collaboration/Teamwork	4.33	0.62	High

Desired Leadership Attributes *Variable*	Mean	SD	Interpretation
3.2 Communication Skills	4.17	0.62	High
3.3 Critical Thinking	4.07	0.64	High
3.4 Leadership	4.10	0.64	High
3.5 Problem Solving	4.15	0.66	High
Average	4.17	0.59	High
Grand Average	4.24	0.52	High

The survey results indicated the grand average desired leadership attributes' mean score was 4.24 and the standard deviation (SD) was 0.52, which means that the participants, non-academic staff in a selected Thai PHEI, were expected the desired leadership capabilities at their workplace at a high level (Table 2).

Table 2 also shows each main theoretical leadership attributes have a varying level of the average mean score. When comparing the difference between the grand average mean score (Mean = 4.24, SD = 0.52) and the average mean score of three main theoretical leadership attributes. It was found that the average mean score of the desired Servant Leadership attributes revealed an average mean score (Mean = 4.32, SD = 0.47) higher than the grand average mean. Meanwhile, the desired Talent Leadership attributes (Mean = 4.23, SD = 0.51), and the desired 21st Century Skills (Mean = 4.17, SD = 0.59) were lower than the grand average mean. If listed the main leadership attributes from high to low based on their average mean score, the desired Servant Leadership attributes indicated the highest average mean score that the participated non-academic staff has expected (Mean = 4.32, SD = 0.47), followed by the desired Talent Leadership (Mean = 4.23, SD = 0.51), while the desired 21st Century Skills had the lowest average mean score of 4.17 (SD=0.59), respectively.

Research Objective Two
To determine the current leadership capabilities of non-academic staff in a Thai private higher education institution.

To respond to Research Objective Two, the researcher conducted a survey questionnaire to evaluate non-academic staff perceptions of their current leadership capability practices. Data was collected through 72 items in which the survey describes their leadership capability using a 5-point scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).
The Current Leadership Capabilities of Non-academic Staff of a Thai Private Higher Education Institution. The information in Table 3 presents the

summary of the perceptions of the current leadership attributes on fifteen leadership attributes based on three main leadership frameworks.

Table 3. *Summary of survey results of leadership attributes (n=395)*

Current Leadership Capabilities		Mean	SD	Interpretation
	Variable			
1.	Talent Leadership Attributes			
	1.1 Achiever	3.90	0.48	High
	1.2 Communication	4.04	0.56	High
	1.3 Futuristic	3.93	0.50	High
	1.4 Responsibility	4.13	0.60	High
	1.5 Strategic Thinking	3.81	0.70	High
	Average	3.96	0.45	High
2.	Servant Leadership Attributes			
	2.1 Empowerment	4.17	0.61	High
	2.2 Humility	4.02	0.51	High
	2.3 Service	4.10	0.51	High
	2.4 Stewardship	4.22	0.57	High
	2.5 Vision	3.80	0.81	High
	Average	4.06	0.47	High
3.	21st Century Skills			
	3.1 Collaboration/Teamwork	4.04	0.76	High
	3.2 Communication Skills	3.87	0.68	High
	3.3 Critical Thinking	3.73	0.61	High
	3.4 Leadership	3.76	0.59	High
	3.5 Problem Solving	3.87	0.82	High
	Average	3.85	0.56	High
	Grand Average	3.96	0.44	High

The survey results indicated the grand average current leadership attributes' mean score was 3.96 and the standard deviation (SD) was 0.44, which means that the participants, non-academic staff in a selected Thai PHEI, were practiced the current leadership capabilities at their workplace at a high level (Table 3).

Table 3 also shows each main theoretical leadership attributes have a varying level of the average mean score. When comparing the difference between the grand average mean score (Mean = 3.96, SD = 0.44) and the average mean score of three main theoretical leadership attributes. It was found that the average mean score of the current Talent Leadership attributes (Mean = 3.97, SD = 0.45) and the current Servant Leadership attributes (Mean = 4.07, SD = 0.47) were revealed to have an average mean score higher than the grand

average mean. However, only the current 21st Century Skills showed the average mean score (Mean = 3.85, SD = 0.56) lower than the grand average mean. If listed the main leadership attributes from high to low based on their average mean score, the current Servant Leadership attributes indicated the highest average mean score that the participated non-academic staff has perceived (Mean=4.07, SD=0.47), followed by Talent Leadership attributes (Mean=3.97, SD=0.45), while 21st Century Skills had the lowest average mean score of 3.85 (SD=0.56), respectively.

Research Objective Three
To find the gap between the desired and current leadership capabilities of non-academic staff in a Thai private higher education institution.

A gap analysis was performed by subtracting the value assigned to the current column from the desired column's value. This analysis identified discrepancies between the current and desired performance for each item. The gap's size provided information in determining the perceived importance of the need or threat (Watkins, West Meiers, Visser, 2012). For each item, the positive or negative value of the gap was identified "to differentiate the needs or threat (when desired is greater than current) from strengths or opportunities (when *what is* (WI) is greater than *what should be* (WSB)." The direction of the discrepancy provided a context to identify needs or threats having the potential to be addressed through strategic efforts and opportunities that may be leveraged for more effective adaption.

The following tables present the mean scores of the desired and current leadership attributes. The different scores between the two mean scores of the result (MDF) were calculated from the non-academic staff's fifteen leadership attributes in accordance with three main leadership frameworks as follows: 1) Talent Leadership attributes; achiever, communication, futuristic, responsibility, and strategic thinking, 2) Servant Leadership attributes; empowerment, humility, service, stewardship, and vision, and 3) 21st Century Skills; collaboration/teamwork, communication skills, critical thinking, leadership, and problem-solving based on questionnaires. In each attribute, the participating non-academic staff responded to their self-perception on leadership capabilities performing by evaluating the score of desired and current status. The mean score, MDF, *t*-statistic, *p*-value, and a statistical ranking of the desired and current status are presented in Table 4.

A two-tailed paired-samples *t*-test was used to determine whether there was a significant difference in the non-academic staff perceptions of leadership

capabilities performing between the desired and current leadership attributes by comparing their mean scores revealed a significant difference (p<0.05).

Table 4. Summary of means, MDF, t-statistic, p-value, and ranking of the survey results of leadership attributes in this study (n=395)

Variable	Mean			*t*-statistic	*p*-value	Ranking
	Desired	*Current*	*MDF*			
1. Talent Leadership Attributes						
1.1 Achiever	4.18	3.90	0.28	10.65	0.000*	2
1.2 Communication	4.26	4.04	0.22	6.96	0.000*	3
1.3 Futuristic	4.23	3.93	0.30	11.19	0.000*	1
1.4 Responsibility	4.33	4.13	0.20	6.97	0.000*	4
1.5 Strategic Thinking	4.11	3.81	0.30	8.14	0.000*	1
Average	4.23	3.97	0.26	10.90	0.000*	-
2. Servant Leadership Attributes						
2.1 Empowerment	4.38	4.17	0.21	6.98	0.000*	3
2.2 Humility	4.33	4.02	0.31	11.74	0.000*	1
2.3 Service	4.39	4.10	0.29	11.12	0.000*	2
2.4 Stewardship	4.38	4.22	0.16	6.67	0.000*	4
2.5 Vision	4.09	3.80	0.29	6.80	0.000*	2
Average	4.32	4.07	0.25	10.50	0.000*	-
3. 21st Century Skills						
3.1 Collaboration /Teamwork	4.33	4.04	0.29	7.76	0.000*	3
3.2 Communication Skills	4.17	3.87	0.30	8.42	0.000*	2
3.3 Critical Thinking	4.07	3.73	0.34	11.02	0.000*	1
3.4 Leadership	4.10	3.76	0.34	11.81	0.000*	1
3.5 Problem Solving	4.15	3.87	0.28	7.29	0.000*	4
Average	4.17	3.86	0.31	10.97	0.000*	-
Grand Average	4.24	3.96	0.28	11.99	0.000*	-

* p<0.05

Table 4 shows the average MDF scores of the three main theoretical leadership attributes. The *t-statistics* were applied to evaluate the mean difference between the desired and current leadership capabilities. The results revealed a statistically significant difference between the desired and current leadership capabilities of the participating non-academic staff on three main theoretical leadership attributes at a 0.05 level (t=11.99, p<0.05). This meant a significant difference between the desired and current state among the participants on their three main theoretical leadership attributes.

When investigating the *p*-value for the average MDF scores among the three main theoretical leadership attributes, the *p*-value of all three main theoretical leadership attributes was less than 0.05 level ($p<0.05$). In conclusion, there was a statistically significant difference between the two mean scores among the three main theoretical leadership attributes.

Based on the total average MDF score of 0.28, if comparing the average MDF score of each main theoretical leadership attribute done by the participating non-academic staff. The participants have perceived the average MDF score of 21st Century Skills as a higher level than the grand average MDF score of 0.31 and were labeled the highest average MDF score among the two main leadership attributes. While talent leadership and Servant Leadership attributes presented the average MDF score at 0.26 and 0.25, respectively.

Results related to Performance Analysis (Gap Analysis). A gap analysis was used to satisfy Research Objective Three to compare actual respondents' potential leadership capabilities. Upon identification of such gaps, the researcher can begin to define the necessary steps to get non-academic staff from their current state of leadership capabilities to the desired state and start planning intervention schemes aimed at improving or enhancing non-academic staff's leadership capabilities. Figures 2 and 3 indicated relatively high correlations between the desired state and the current state of the three main leadership attributes of non-academic staff.

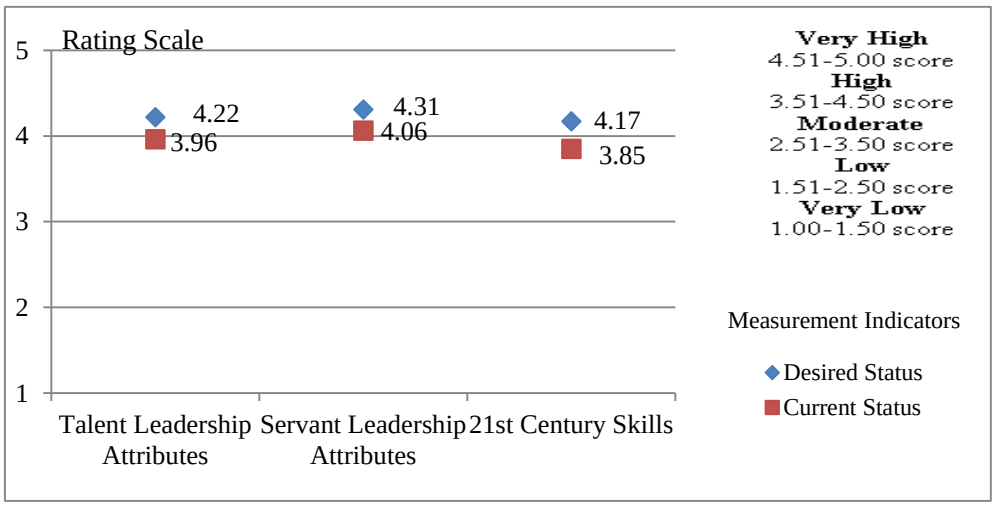

Figure 2. ***Performance of the Participated Non-academic Staff's Desired and Current Status on Three Main Leadership Attributes.***
Source: Adapted from Martilla, J. A., & James, J. C. (1977). Importance-performance analysis. *Journal of Marketing, 41,* 77-79.

The results in Figure 2 indicate that the desired status of all main leadership attributes was perceived by non-academic staff at a high level, with mean scores ranging from 4.17 to 4.31. The mean score of Servant Leadership was perceived as the highest at 4.31, followed by Talent Leadership at 4.22, while 21st-Century Skills had the lowest mean score at 4.17. The current status of all main leadership attributes, relatively high, with mean scores ranging from 3.85 to 4.06, was found. The current status of Servant Leadership revealed the highest mean at 4.06, and Talent Leadership obtained a mean score of 3.96, while 21st Century Skills was perceived at the lowest mean score of 3.85. Additionally, when comparing perceived mean scores between the desired and the current status of all main leadership attributes, it was found that there were higher mean scores in all the desired categories than in all the current categories.

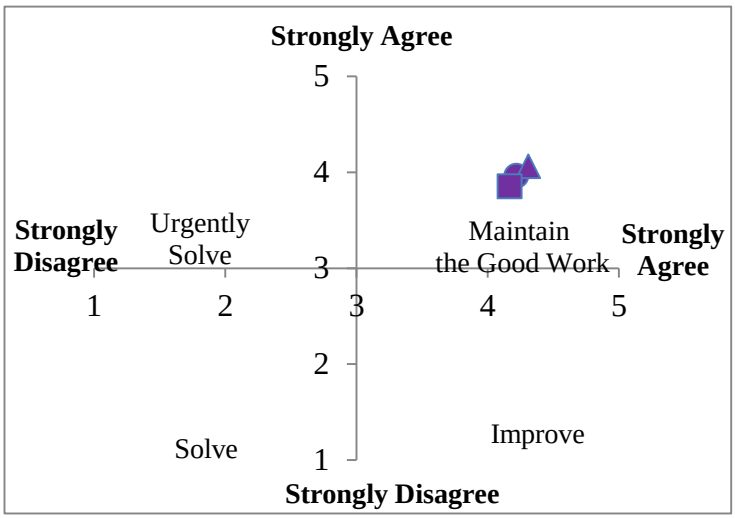

Figure 3. ***Gap Analysis of Assessment of Non-academic Staff's Desired and Current Status on Main Leadership Attributes***

Source: Adapted from Martilla, J. A., & James, J. C. (1977). Importance-performance analysis. *Journal of Marketing, 41,* 77-79.

Gap analysis was used to assess the difference between non-academic staff's desired and current state on their main leadership attributes to identify areas for focusing improvement efforts (Figure 3). In this study, all the desired and current leadership attributes were perceived at a relatively high level, as plotted on Quadrant I. Therefore, the non-academic staff is suggested to continue practicing their good work level. Although the results recommend that non-academic staff maintained their appropriate practice related to the

main leadership attribute. It is advised that they place a priority of improvement on the main leadership attributes based on the total MDF scores arranged in descending order (highest to lowest) as follows: 1) 21st Century Skills (MDF=0.31), 2) Talent Leadership attribute (MDF=0.26), and 3) Servant Leadership attribute (MDF=0.25).

The following summary statistical results derived from self-evaluated questionnaires done by the participating non-academic staff in a selected Thai PHEI were composed to develop a proposed model for enhancing the leadership capabilities of non-academic staff in a Thai PHEI.

Summary Results of Self-evaluated Questionnaires done by the Participated Non-academic Staff

Table 5 shows a summary of the survey results derived from the participating non-academic staff.

Table 5. *Summary of Mean and MDF of the Survey Results Done by the Participating Non-Academic Staff in a Selected Thai PHEI (n=395)*

Variable	Mean			Remark*
	Desired	*Current*	*MDF*	
1. Talent Leadership Attributes				
1.1 Achiever	4.18	3.90	0.28	
1.2 Communication	4.26	4.04	0.22	
1.3 Futuristic	4.23	3.93	0.30	*
1.4 Responsibility	4.33	4.13	0.20	
1.5 Strategic Thinking	4.11	3.81	0.30	*
Average	4.23	3.97	0.26	
2. Servant Leadership Attributes				
2.1 Empowerment	4.38	4.17	0.21	
2.2 Humility	4.33	4.02	0.31	*
2.3 Service	4.39	4.10	0.29	*
2.4 Stewardship	4.38	4.22	0.16	
2.5 Vision	4.09	3.80	0.29	*
Average	4.32	4.07	0.25	-
3. 21st Century Skills				
3.1 Collaboration/Teamwork	4.33	4.04	0.29	
3.2 Communication Skills	4.17	3.87	0.30	
3.3 Critical Thinking	4.07	3.73	0.34	*
3.4 Leadership	4.10	3.76	0.34	*
3.5 Problem Solving	4.15	3.87	0.28	

Variable	Mean			Remark*
	Desired	*Current*	*MDF*	
Average	4.17	3.86	0.31	-
Grand Average	4.24	3.96	0.28	-

** MDF score indicated higher than the average MDF score and the grand average MDF score.*

The researcher designated only sub-leadership attributes that its MDF score indicated higher than both the average MDF score of its main theoretical leadership attributes and the grand average MDF score of all main theoretical leadership attributes to utilize as the main components of a proposed model to enhance leadership capabilities of non-academic staff in a selected Thai PHEI. Therefore, seven sub-leadership attributes that its MDF labeled score higher than both its main theoretical leadership attribute's average MDF score and the grand average MDF score of all main theoretical leadership attributes derived from the self-evaluated questionnaires done by the participating non-academic staff were used as a part of the model components. There were as the following, 1) Talent Leadership attributes; "Futuristic" (MDF = 0.30), and "Strategic Thinking" (MDF = 0.30) attributes, 2) Servant Leadership attributes; "Humility" (MDF = 0.31), "Service" (MDF = 0.29), and "Vision" (MDF = 0.29) attributes, and 3) 21st Century Skills; "Critical Thinking" (MDF = 0.34), and "Leadership" (MDF = 0.34) (see Table 5).

Research Objective Four
To assess the influence of demographic factors on the leadership capabilities of non-academic staff in a Thai private higher education institution.

Research Objective Four was to study the influence of demographic factors on desired and current leadership capabilities and the capabilities gap between them, including age, gender, highest degree earned, employment type, current functional area, and years of employment. In this study, gender and employment type utilized the independent samples t-test as the data analysis method to determine whether there is a statistically significant difference between the means in the two independent groups. One-way ANOVA is also used for research objective four to identify the mean difference between more than two groups, including age, highest degree earned, current functional area, and years of employment on leadership capabilities of the participating non-academic staff.

General Findings of the Participants. This study's population comprises 395 non-academic staff and 25 supporting unit administrators of a selected Thai PHEI. Most of the non-academic staffs' ages fell between 41 and 50, and more

female non-academic staff participated in this survey. The highest education of the participants was a bachelor's degree. Most were employed as full-time staff and working in an academic faculty office. There were non-academic staff who had five years or less of employment. Most of the supporting unit administrators' ages fell between 51 - 60 years old, and more male administrators participated in the interview. The highest education of these interviewed participants was a doctoral degree, and they had over 25 years of employment.

In summary, when combining all the leadership attributes investigated in this study, the influence of selected demographic factors on the outcome regarding the desired status, the current status, and capabilities gap between the non-academic staff of a Thai PHEI, including age, gender, highest degree earned, employment type, and current functional area. The Findings showed the statistical analysis results revealed no significant differences between the groups in gender, employment type, and the current functional area ($p>0.05$). However, a significant difference between the groups' age, the highest educational background, and the years of employment of the participating non-academic staff was found at a *p*-value of less than 0.05. A Pearson's correlation coefficient was used to determine the correlation between each leadership attribute's overall perception among the desired attributes, the current attributes, and the gap between them. A generally high significant correlation was found between the desired status, the current status, and the capabilities gap.

Research Objective Five
To develop a model for enhancing leadership capabilities of non-academic staff in a Thai private higher education institution.

Objective Five of the study was to develop an intervention model for enhancing the leadership capabilities of non-academic staff in a Thai PHEI.

A proposed model for enhancing the leadership capabilities of non-academic staff of a Thai PHEI was developed based on the results of the desired and current leadership capabilities. The significant differences and "capabilities gap" between the desired and current leadership capabilities of non-academic staff in a Thai PHEI and the data results from interviewing supporting unit administrators. Finally, the model validation process was conducted to the focus group of experts to prove the effectiveness and possibility of using the model in a target Thai PHEI.

A Combination of Obtained Data from the Questionnaires and In-depth Interviews.

Table 6 proposes a summary of the leadership attributes that the researcher utilized as the model's framework for enhancing the leadership capabilities of non-academic staff in a Thai PHEI of this study.

Table 6. *Combination Summary of Leadership Capabilities Attributes for Development, a Model for Enhancing Leadership Capabilities of Non-Academic Staff That Proposed by the Researcher*

Leadership Attributes	Data Sources			Core Attributes to be developed
	Non-academic Staff	*Supporting Unit Administrators*		
	*MDF**	*MDF**	*Importance Ranking***	
1. Talent Leadership Attributes				
1.1 Achiever				
1.2 Communication		1.28*		√
1.3 Futuristic	0.30*	1.12*	√**	√
1.4 Responsibility				
1.5 Strategic Thinking	0.30*	1.28*		√
Average	0.26	1.10	-	-
2. Servant Leadership Attributes				
2.1 Empowerment			√**	√
2.2 Humility	0.31*			√
2.3 Service	0.29*			√
2.4 Stewardship				
2.5 Vision	0.29*	1.00*		√
Average	0.25	0.74	-	-
3. 21st Century Skills				
3.1 Collaboration/Teamwork				
3.2 Communication Skills		1.08*		√
3.3 Critical Thinking	0.34*	1.36*		√
3.4 Leadership	0.34*			√
3.5 Problem Solving			√**	√
Average	0.31	1.03	-	-
Grand Average	0.28	0.95	-	-

** MDF score indicated higher than the average MDF score and the grand average MDF score.*

*** The most important ranking order of each main leadership attributes.*

Table 6 shows the consolidated leadership attributes for the development of a model for enhancing leadership capabilities of non-academic staff that derived from two originated sources, as follows: 1) Seven sub-leadership attributes

resulting from self-evaluated questionnaires done by the participated non-academic staff were as the following, “Futuristic,” “Strategic Thinking,” “Humility,” “Service,” “Vision,” “Critical Thinking,” and “Leadership” attributes. And 2) Eight sub-leadership attributes resulting from in-depth interview responded by supporting unit administrators were; “Communication,” “Futuristic,” “Strategic Thinking,” “Empowerment,” “Vision,” “Communication Skills,” “Critical Thinking,” and “Problem Solving” attributes were combined. Therefore, there was eleven core leadership attributes resulting from the consolidation of the two data sources to be composed as the main components of leadership capabilities of a proposed model for enhancing leadership capabilities of non-academic staff in a selected Thai PHEI of this study (Table 6), which were: 1) Talent Leadership attributes; “Communication,” “Futuristic,” and “Strategic Thinking” attributes, 2) Servant Leadership attributes; “Empowerment,” “Humility,” “Service,” and “Vision” attributes, and 3) 21st Century Skills; “Communication Skills,” “Critical Thinking,” “Leadership,” and “Problem Solving” attributes. The researcher determined these eleven leadership attributes could enhance the leadership capabilities of non-academic staff in a selected Thai PHEI. The model is formed in the diagram below (Figure 4).

A Proposed Model for Enhancing Leadership Capabilities of Non-academic Staff in a Thai Private Higher Education Institution

As the essential components of a proposed model for enhancing the leadership capabilities of non-academic staff in a selected Thai PHEI, eleven synthesized leadership capabilities of the three main leadership approaches are contained. The indicated components of the model are represented by a selected Thai PHEI management’s process for utilizing the synthesized attributes in the institutional systems, aimed at improving non-academic staffs’ leadership capabilities regarding the relevant leadership approaches. The proposed model included the following leadership attributes: Attribute 1 – Communication; Attribute 2 – Futuristic; Attribute 3 – Strategic Thinking; Attribute 4 – Empowerment; Attribute 5 – Humility; Attribute 6 – service; Attribute 7-vision; Attribute 8 – Communication Skills; Attribute 9 – Critical Thinking; Attribute 10 – Leadership; and Attribute 11 – Problem-Solving as shown in Figure 4.

Model Validation by Experts

To validate the model’s accuracy, appropriateness, feasibility, and utility, the researcher proposed the model “A Model for Enhancing Leadership Capabilities of Non-academic Staff in a Thai Private Higher Education Institution” to 25 supporting-line administrators of a selected Thai PHEI as the focus group experts. The supporting-line administrators were selected for their

experience, and their current position as managers or supervisors of non-academic staff in the institution. Upon validation, the experts or supporting unit administrators unanimously approved the proposed model and certified that it was applicable to enhance the leadership capabilities of non-academic staff in a Thai PHEI. The experts' minor comments did not adversely affect or require a change to the original model as proposed by the researcher.

Table 7. *Summary of Model Validity Results by the Experts*

Leadership Attributes	Standard Statements for Evaluation										Inter-preta-tio
	Accuracy		*Appropriate*		*Feasible*		*Utility*		*Total*		
	Mean	*SD*	*Mean*	*SD*	*Mean*	*SD*	*Mean*	*SD*	*Mean*	*SD*	
1. Talent Leadership Attributes											
- Communication	4.80	0.50	4.48	0.58	4.24	0.83	4.56	0.50	4.52	0.41	Very High
- Futuristic	4.64	0.63	4.28	0.79	4.08	0.57	4.44	0.58	4.36	0.43	High
- Strategic Thinking	4.64	0.63	4.40	0.64	4.12	0.60	4.44	0.65	4.40	0.49	High
Average	4.69	0.42	4.38	0.56	4.14	0.53	4.48	0.51	4.42	0.40	High
2. Servant Leadership Attributes											
- Empowerment	4.60	0.57	4.48	0.65	4.08	0.70	4.12	0.78	4.32	0.51	High
- Humility	4.76	0.43	4.40	0.64	4.24	0.83	4.36	0.56	4.44	0.52	High
- Service	4.56	0.58	4.48	0.58	4.04	0.73	4.28	0.67	4.34	0.51	High
- Vision	4.48	0.58	4.12	0.83	4.08	0.75	4.32	0.62	4.25	0.58	High
Average	4.60	0.44	4.37	0.54	4.11	0.63	4.27	0.54	4.33	0.48	High
3. 21st Century Skills											
- Communication Skills	4.88	0.33	4.56	0.58	4.24	0.72	4.36	0.70	4.51	0.48	Very High
- Critical Thinking	4.68	0.62	4.24	0.83	4.24	0.63	4.28	0.73	4.36	0.54	High
- Leadership	4.56	0.76	4.44	0.65	4.16	0.68	4.24	0.66	4.35	0.55	High
- Problem Solving	4.84	0.37	4.44	0.58	4.36	0.70	4.36	0.75	4.36	0.75	High
Average	4.74	0.39	4.74	0.39	4.25	0.62	4.31	0.60	4.43	0.48	High
Grand Average	4.67	0.38	4.39	0.50	4.16	0.53	4.35	0.48	4.39	0.43	High

The results in Table 7 indicated the proposed model for enhancing leadership capabilities of non-academic staff for a Thai PHEI was responded to by the experts according to the accuracy, appropriate, feasible, and utility standard statements for evaluation with the grand total mean score at a high level (Mean=4.39, SD=0.43) ranged from 4.16 to 4.67. A standard statement for evaluating accuracy was determined as the highest grand total score mean (Mean=4.67, SD=0.38). Meanwhile, the standard statement of feasibility was responded at the lowest grand total score mean of 4.16 (SD=0.53). In contrast to the participants, the experts rated the Servant Leadership attribute at the lowest level when comparing the total mean score of all standard statements for evaluation among the main leadership attributes. Meanwhile, 21st Century Skills were approved as the highest level at most of the standard statements for evaluation.

Considering the standard accuracy statement for evaluating the main leadership attributes, the total mean score ranged from 4.60 to 4.74. The 21st Century Skills had the highest total mean score of 4.74 (SD=0.39). The Servant Leadership attribute had the lowest total mean score at 4.60 (SD=0.44). The overall assessment results revealed the appropriate standard statement for evaluating each main leadership attribute at a high level ranging from 4.37 to 4.74. 21st Century Skills had the highest total mean score of 4.74 (SD= 0.39). Servant Leadership had the lowest mean score of 4.37 (SD=0.54). The findings showed the total mean scores of a feasible standard statement of evaluation ranged from 4.11 to 4.25. 21st Century Skills reached the highest level (Mean=4.25, SD=0.62). On the other hand, Servant Leadership attributes revealed having the lowest mean score of 4.11 (SD=0.63). Once investigating a standard utility statement of evaluation, the main leadership attributes were evaluated with overall high levels ranging from 4.27 to 4.48. Talent Leadership had the highest scoring at 4.48 (SD=0.51). Servant Leadership had the lowest mean score of 4.27(SD=0.54).

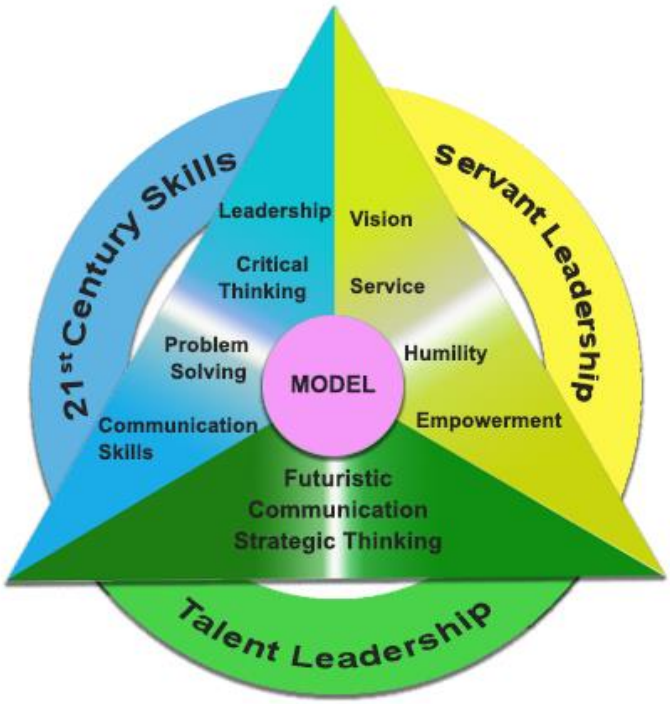

Figure 4. ***The Final Model for Enhancing Leadership Capabilities of Non-academic Staff in a Thai Private Higher Education Institution***

When comparing the total mean score of all statements, the experts indicated high total mean scores ranging from 4.33 to 4.43 for each main leadership attribute. The highest mean score was 21st Century Skills (Mean=4.43, SD=0.48), while Servant Leadership had the lowest total mean score (Mean=4.33, SD=0.48). In summary, when considering the overall grand total mean score, according to the experts' evaluation, indicates a high-level scoring index of 4.39 (SD=0.43). Therefore, the researcher concluded that the experts approved the model for enhancing the leadership capabilities of non-academic staff in a Thai PHEI. The final validated model is shown in Figure 4.

Figure 4 shows a final model for enhancing the leadership capabilities of non-academic staff in a selected Thai PHEI that is represented in four parts: Part 1) The inner core circle represents a constructed model as the outcome. Part 2) The green-colored sector represents a selected Thai PHEI management's process by utilizing the synthesized attributes and the need for improvement of non-academic staffs' leadership capabilities of the relevant Talent Leadership approaches into the institutional systems. Part 3) The yellow-colored zone represents the need for synthesized attributes of the relevant Servant Leadership approaches that specify the selected Thai PHEI management's process for improvement to non-academic staff. Lastly, Part 4) The blue-colored area represents the need for improvement of the non-academic staff's leadership capabilities which relates to 21st Century Skills approaches.

Discussion

The conceptual framework of the desired and the current leadership capabilities in this study based on relevant theoretical and attributes frameworks on leadership (Talent Leadership, Servant Leadership, and 21st Century Skills) of non-academic staff in a select Thai PHEI was determined through the processes of literature review, analysis, and synthesized relevant literature, as well as derived useful information from experts' opinion. As a result, the number five attributes of each main leadership attribute were synthesized to use as the measurement indicator framework of this study. Similarly, the qualitative data findings of Davis (2016) consolidated the framework context of the Partnership for 21st Century Learning 4-C's (2012) and the seven survival skills (Wagner, 2010) into eight dominant 21st-century skills for workers. Furthermore, most of this study's derived desired leadership attributes were aligned with three main categorized groups of the 21st-century skills framework (Trilling & Fadel, 2009). The assessment result from the survey questionnaires indicated the participating non-academic staff practiced the overall desired and current leadership attributes at their workplace at a high level of an average mean score with all the attribute indicators. This is assumed

that the participating non-academic staff highly performed the core principle of "desire to serve" in their daily work. Non-academic staff prioritized serving their stakeholders' needs before their own and were not concerned about attaining more power. To colleagues, non-academic staff put priority on supporting their full personal capacities through creating long-term relationships and unconditional perceptions of their individual abilities, needs, and goals. In view of an emphasis on their self-psychological reinforcement, confidence and trust, sympathy and empathy, and beliefs when non-academic staff takes action, colleagues who underperform receive more attention, understanding, and motivation for improvement, including openness to renewal and innovation in order to increase teamwork, have deeper engagement and exhibit better performance.

A general high significantly correlated was found when utilizing Person's correlation coefficient to measure the desired status, the current status, and the capabilities gap between them the main leadership attributes. Moreover, expected performance (gap analysis) was determined to be a relatively high correlation level of leadership capabilities of non-academic staff with a high mean score ranked, which indicated the high correlation between the desired state and the current state. The participating non-academic staff suggested that the current leadership attributes could be maintained at the status quo to ensure continuous good work. Even though few capability gaps were found, the participants have advised the concentration on improvement on each leadership attribute.

A set of selected demographic factors of the participants were compared to assess the influences on the leadership capabilities of the participating non-academic staff. The findings showed the static analysis results revealed no significant differences between the groups of gender, employment type, and the current functional area; however, significant differences between the groups' age, the highest educational background, and the years of employment were found. This point was similar and consistent with the results of a study by Urosevic & Milijic (2012), who examined the influence of the employee's demographic background, including age, a number of a year spent in a company, and professional qualifications, on their attitudes and perceptions towards satisfaction and job motivation. The results revealed that the respondents' different age groups and educational levels had no significant influence. Meanwhile, the influence of years spent in a company was not significantly found.

The proposed model of this study was developed by consolidating the findings from all the objectives and subsequence evaluation by twenty-five experts who

met a set of criteria. The finalized model comprised four parts (the inner core cycle, three synthesized attributes of the relevant Talent Leadership approaches, four synthesized attributes of the relevant Servant Leadership approaches, and four synthesized attributes of the relevant 21st Century Skills approaches.

This study's findings were presented, highlighting leadership issues connected with the leadership capability of non-academic staff in a selected Thai PHEI. Therefore, the results of this study are expected to make several contributions to non-academic staff, supporting unit administrators, policymakers, PHEI administrators, and further academic research. Firstly, it could significantly benefit the non-academic staff involved. They are certainly developed systematically to gain leadership capabilities that could enable them to be highly capable of taking roles of leaders with or without a designated position. Secondly, this constructed model could raise supporting unit administrators and policy makers' awareness of the importance of developing the leadership capabilities of their subordinates in appropriate response to stakeholders' needs as fully developed with this model. Lastly, the result of this study may encourage future researchers to use the constructed model to further investigate in wider contexts, including different fields and locations across the country with a selected Thai PHEI sample. This helps generalize the results that would be beneficial for the other Thai HEI, both private and public, to promote the leadership capabilities of non-academic staff.

The information of sources for the literature review utilized in this study contained several limitations. The relevant literature, as well as useful information from experts' opinions, were not representative of the whole frame of research related to leadership capabilities and responded in quite general situation. This study might also have a limited transferability to other type of higher education institutions as convenient populations were utilized in this study, and the sample was focused on other Thai PHEIs. The research population was limited to a Thai PHEI but could be enlarged to other Thai private and public higher education institutions. A population and sample integrating private and public higher education institutions can also enlarge the scope of the study and offer more data for the elaboration of common initiatives for leadership capability development in future research. For more credibility and further value to the study, the future research could be derived from assessing leadership and services attributes in climates of technology disruption and uncertainty, as was experienced in the situation of the COVID-19 pandemic, by adding the questions pertaining to current situations or more particular term due to education situation nowadays was quite challenging and complicated to solve the problem than before.

Conclusion

In a word, according to the result of this study, the researcher does not attempt to change the non-academic staff fundamentals. Since the statistical results indicated a relatively high level at all the current leadership attributes practices, but to shore up the weakness and enhance their strengths, non-academic staff became the experts with leadership capabilities. Non-academic staff should aim to shape up with leadership attributes to act as leaders even without a position. Additionally, observed that the complexity of leadership attributes perception based on differentiation according to the participants' demographic was happened. So, there was no unique way to enhance non-academic staff leadership attribute individually. This study cannot create a ready-made initiative but can provide useful guidelines or directions for booting up non-academic staff's leadership attributes. Though the constructed model could not be fully implemented, higher education institutions' administrators should allow non-academic staff to adapt model instructions at their own pace. As the higher education institutions' administrators had to focus more on their leadership roles, the model would be adapted gradually and progressively.

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